

Exhibit No.:

Witness:

Type of Exhibit:

Sponsoring Party:

Maurice Brubaker

Direct Testimony

Holnam, Inc., River

Cement Company and

Lone Star Industries

EO-2000-580

Case No.

**Before the Public Service Commission
of the State of Missouri**

In the Matter of an Investigation)
Into an Alternative Rate Option for)
Interruptible Customers of Union)
Electric Company d/b/a/ AmerenUE)

Case No. EO-2000-580

Direct Testimony of

Maurice Brubaker

FILED²

JUL 19 2000

Missouri Public
Service Commission

On behalf of

**Holnam, Inc., River Cement Company
and Lone Star Industries**

Project 7042

July 2000

Brubaker & Associates, Inc.
St. Louis, MO 63141-2000

Before the Public Service Commission
of the State of Missouri

In the Matter of an Investigation)
Into an Alternative Rate Option for)
Interruptible Customers of Union)
Electric Company d/b/a/ AmerenUE)
_____)

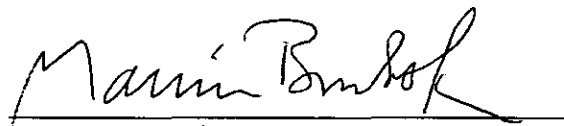
Case No. EO-2000-580

STATE OF MISSOURI)
COUNTY OF ST. LOUIS) SS

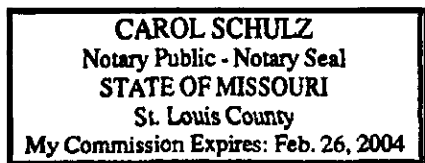
Affidavit of Maurice Brubaker

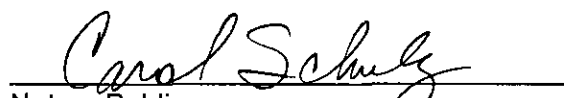
Maurice Brubaker, being first duly sworn, on his oath states:

1. My name is Maurice Brubaker. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000. We have been retained by Holnam, Inc., River Cement Company and Lone Star Industries in this proceeding on their behalf.
2. Attached hereto and made a part hereof for all purposes is my direct testimony and schedule which was prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. EO-2000-580.
3. I hereby swear and affirm that the testimony and schedule are true and correct and that they show the matters and things they purport to show.


Maurice Brubaker

Subscribed and sworn to before this 19th day of July 2000.




Notary Public

My Commission Expires February 26, 2004.

**Before the Public Service Commission
of the State of Missouri**

In the Matter of an Investigation)
Into an Alternative Rate Option for)
Interruptible Customers of Union)
Electric Company d/b/a/ AmerenUE)
_____)

Case No. EO-2000-580

Direct Testimony of Maurice Brubaker

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A Maurice Brubaker. My business address is 1215 Fern Ridge Parkway, Suite 208,
3 St. Louis, Missouri 63141-2000.

4 **Q WHAT IS YOUR OCCUPATION?**

5 A I am a consultant in the field of public utility regulation and president of Brubaker &
6 Associates, Inc., energy, economic and regulatory consultants.

7 **Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

8 A This information is included in Appendix A to my testimony.

9 **Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

10 A I am appearing on behalf of Holnam, Inc., River Cement Company and Lone Star
11 Industries (hereafter "Interruptible Customers").

**Maurice Brubaker
Page 1**

1 **Q WHAT IS THE ORIGIN OF THIS PROCEEDING?**

2 A This proceeding grows out of the rate design proceeding involving AmerenUE
3 (hereafter UE), Missouri PSC Case No. EO-96-15. In that case, Interruptible
4 Customers and UE were unable to reach agreement on the appropriate structure and
5 price level for the continuation of an interruptible rate. The Stipulation and Agreement
6 entered into by the parties to the rate design case on April 30, 1999 provided the
7 option for Interruptible Customers to file to initiate this docket. This Stipulation and
8 Agreement was subsequently approved by the Missouri Public Service Commission.

9 Although Interruptible Customers and UE subsequently engaged in numerous
10 discussions with respect to the appropriate structure and price level for an
11 interruptible rate, those discussions did not result in any agreement. Hence,
12 Interruptible Customers filed with the Commission to open this proceeding.

13 **Q DID INTERRUPTIBLE CUSTOMERS MAKE A PROPOSAL TO UE WITH RESPECT**
14 **TO HOW AN INTERRUPTIBLE RATE SHOULD BE STRUCTURED?**

15 A Yes. Around the beginning of the year, Interruptible Customers offered a proposal to
16 UE which would modify the existing Interruptible Rate 10M in a manner which
17 Interruptible Customers believed would meet some of the objections that UE has
18 previously leveled against Rate 10M. The modifications to 10M that were proposed
19 by Interruptible Customers contained seven points, and bore the date of
20 December 14, 1999. This outline was attached to the Application of Industrial
21 Customers to initiate this docket, filed on March 20, 2000.

1 **Q DID UE PROVIDE INTERRUPTIBLE CUSTOMERS WITH A SPECIFIC CRITIQUE**
2 **OF THESE PROPOSALS?**

3 A No. Although requested to do so several times, UE essentially responded that they
4 were no longer interested in this form of interruptible tariff. Instead, they offered an
5 alternative rate product which has subsequently been filed as Rider M. No
6 meaningful discussions took place with respect to the proposal made by Interruptible
7 Customers.

8 **Q IS RIDER M AN ADEQUATE SUBSTITUTE FOR INTERRUPTIBLE RATE 10M?**

9 A No, it is not. After extensive discussions with UE, the Interruptible Customers
10 informed UE that the proposed Rider M was not suitable for use by them. None of
11 these customers have signed up for Rider M, and, accordingly, approximately 60,000
12 kilowatts of load that was interruptible for utility system reliability purposes is no
13 longer available to UE on an interruptible basis. Instead, interruptible customers have
14 been forced to take all of their power requirements on a firm basis, incurring an
15 electricity cost which exceeds their previously incurred cost under the combination of
16 firm service/interruptible service by about \$2,400,000 per year.

17 As a result of UE's withdrawal of Rate 10M, and the inability of these
18 customers to utilize Rider M, UE no longer has a reliability call on approximately
19 40,000 kilowatts of load within its service territory that could be interrupted if utility
20 system conditions are such that the reliability of service to firm load is threatened or
21 jeopardized.

1 **Q PLEASE EXPLAIN THE ELEMENTS OF THE TARIFF WHICH INDUSTRIAL**
2 **CUSTOMERS ARE PROPOSING, AND THE DIFFERENCES FROM THE RATE**
3 **10M.**

4 **A This is most easily done by referring to Schedule 1, which is a duplicate copy of the**
5 **list of interruptible rate concepts previously referenced.**

6 Point No. 1 specifies a change in the interruption conditions from Rate 10M.
7 Like 10M, Interruptible Customers proposed that UE continue to be able to interrupt
8 for reliability purposes, consistent with the then current Rate 10M. The change made
9 was to eliminate the right to interrupt simply because a utility system peak was
10 expected to occur.

11 **Q WHAT WAS THE BASIS FOR THIS EXCLUSION?**

12 **A Interruptible power has traditionally been used for reliability purposes. It gives the**
13 **utility an opportunity to curtail the load if the capacity being used to serve it is needed**
14 **to maintain reliable service to firm customers. The fact that a system peak is**
15 **approaching is not an indication of a reliability problem on the utility system. It is**
16 **simply an event. If a system peak is approaching, and the utility has adequate**
17 **capacity to serve all of its load, including interruptible customers, there is absolutely**
18 **no reason to require these customers to interrupt. And, in fact, only rarely has UE**
19 **utilized this provision in the tariff. Over the period 1993 through 1999, there were**
20 **approximately 42 times when interruptible customers were interrupted. Out of those,**
21 **only three were attributed (by UE) to the approach of a system peak load condition.**

1 **Q IN YOUR OPINION, DOES ELIMINATING THE RIGHT TO INTERRUPT JUST**
2 **BECAUSE A SYSTEM PEAK IS APPROACHING DEGRADE THE RELIABILITY**
3 **BENEFITS OF THE INTERRUPTIBLE TARIFF?**

4 **A** Absolutely not. As noted above, there is no relationship between the occurrence of,
5 or the approach of, a system peak on the one hand, and the ability to provide reliable
6 service.

7 **Q DID INTERRUPTIBLE CUSTOMERS PROPOSE TO GIVE UE MORE LATITUDE**
8 **TO INTERRUPT UNDER ANY CIRCUMSTANCES?**

9 **A** Yes. This is outlined in some detail in Point Nos. 3 and 4.

10 **Q PLEASE EXPLAIN THE ADDITIONAL INTERRUPTION RIGHTS WHICH**
11 **INTERRUPTIBLE CUSTOMERS OFFERED TO UE.**

12 **A** Interruptible Customers have recognized that the economics of power in the
13 wholesale market has changed dramatically over the last several years. Historically,
14 utilities rarely experienced prices in excess of 10¢ per kilowatthour (\$100 per
15 megawatthour) during system emergency conditions. Thus, prohibiting the utility from
16 invoking an interruption simply because prices were higher than normal did not
17 impose a significant burden on the utility. In today's market, however, much more
18 extreme price spikes have been experienced. Interruptible Customers recognize this
19 fact, and offered to UE to add to the tariff the right for UE to interrupt for economic
20 reasons. Interruptible Customers suggested to UE that the tariff be modified to allow
21 interruptions for up to 60 hours per calendar year during "high cost periods," which
22 were defined as periods when the incremental cost of generating or purchasing
23 power would be in excess of \$500 per megawatthour.

1 **Q WHAT IS THE BASIS FOR THIS TRIGGER PRICE LEVEL?**

2 A In selecting the trigger price level, the dual objectives were to identify those hours
3 which capture the greatest majority of the high cost episodes, while at the same time
4 not exposing customers to an undue number of additional interruptions. The \$500
5 per megawatthour (\$0.50 per kilowatthour) trigger price level meets those conditions.

6 Using power market price indexes as a guide, there was a total of
7 approximately 30 days during the summers of 1998 and 1999 (together) where prices
8 exceeded \$100 per megawatthour. This consists of 15 days when prices were in the
9 range of \$100 per megawatthour - \$250 per megawatthour, 6 days when prices were
10 in the range of \$250 per megawatthour - \$500 per megawatthour, and 9 days when
11 prices exceeded \$500 per megawatthour. However, almost 75% of the value of the
12 indexes occurred on the days when the prices exceeded \$500. Thus, approximately
13 75% of the high cost could be captured with the right to curtail in only one-third of the
14 hours. In my opinion, this is a reasonable compromise. It gives the utility the
15 opportunity to invoke curtailments or charge higher prices when costs are at extreme
16 levels, yet limits the number of potential additional interruptions that could be
17 required.

18 **Q WHAT WOULD HAPPEN WHEN PRICES REACHED THIS LEVEL?**

19 A Interruptible Customers proposed that when UE anticipated prices would reach this
20 level it invoke a procedure outlined in Point No. 4.

21 **Q PLEASE EXPLAIN THIS PROCEDURE.**

22 A In the event of such a period, UE would notify the customer by 8 o'clock on the day
23 before this price level was expected to be reached, and provide the customer with its

1 good faith best estimate of the incremental cost which would form the basis for the
2 payment or credit under this option. (8 AM is the time when UE notifies its customers,
3 on the same day-ahead basis, under Optional Rider L.)

4 **Q WHAT OPTIONS WOULD THE CUSTOMER HAVE?**

5 A The customer would have two options. The customer would have to notify UE within
6 six hours of the option that it selected.

7 **Q WHAT ARE THESE TWO OPTIONS?**

8 A The first option available to the customer would be to elect to continue to take power
9 from UE, but to pay a price equal to the quoted incremental cost plus a mark-up of 1¢
10 per kilowatthour, applicable to all kilowatthours actually taken in excess of the
11 customer's assurance (firm) power level.

12 **Q WHAT BENEFIT DOES THIS PROVIDE TO UE COMPARED TO THE PREVIOUS**
13 **RATE 10M?**

14 A This is a significant benefit. Under 10M, UE did not have the right to curtail for
15 economic reasons. Thus, even if power prices reached extremely high levels, there
16 was no right to curtail the customer unless there was a reliability reason.

17 Thus, under the proposal made by the Interruptible Customers, UE could
18 charge the customers its best estimate of incremental cost plus a mark-up, for up to
19 60 hours per calendar year during high cost periods – assuming that the customer
20 wanted to continue to take power.

1 **Q WHAT IS THE OTHER OPTION AVAILABLE TO THE CUSTOMER?**

2 A The other option available to the customer was to curtail load. The amount of the
3 curtailment would be at the customer's discretion. This is reasonable because the
4 curtailment is for economic purposes, and not for reliability purposes. In the event of
5 curtailments for reliability purposes, the customer does not have an option – but
6 rather must curtail to its firm level. When the curtailment is because of economics,
7 there is no reason not to give the customer the option to curtail to a level above,
8 equal to or below its firm service level.

9 **Q WHAT COMPENSATION WOULD THE CUSTOMER RECEIVE IF IT RESPONDED**
10 **TO UE'S NOTICE OF A HIGH COST PERIOD BY ELECTING TO CURTAIL?**

11 A The customer would receive a payment from UE equal to 90% of the quoted
12 incremental cost, times the number of kilowatthours estimated to have been curtailed.

13 **Q WHY DO YOU PROPOSE THAT THE SAME INCREMENTAL COST BE USED FOR**
14 **DETERMINING THE PRICE WHICH THE CUSTOMER WOULD PAY IF IT ELECTS**
15 **TO CONTINUE TO TAKE SERVICE, AS WELL AS TO DETERMINE THE AMOUNT**
16 **THAT UE WOULD PAY TO THE CUSTOMER IF THE CUSTOMER ELECTS TO**
17 **CURTAIL?**

18 A Under this approach, UE is setting the price, and the customer is deciding what to do.
19 This brings discipline and rationality to the process. If different mechanisms or prices
20 were used, the confidence in the integrity of the process would be diminished
21 because there would always be a concern that the utility could be gaming the system.
22 By using the same cost basis whether the customer continues to take service, or

1 elects to interrupt, the process becomes symmetrical and the utility is motivated to
2 "quote accurately."

3 **Q PLEASE ELABORATE.**

4 A If the utility quotes a price that is high, relative to market, in an attempt to capture
5 more revenue from the customer by having the customer pay extra to stay on – and
6 can do so without any negative consequences, the customer is essentially defense-
7 less because UE is the only supplier. By also allowing the customer to elect to curtail,
8 and to receive a payment which is a significant fraction of the cost quoted by UE to
9 the customer if the customer wants to stay on, UE is motivated to quote a price that
10 accurately reflects its incremental cost – because it knows it may have to pay this
11 price if the customer elects to curtail.

12 Thus, the symmetry of the process and the structure, I believe, provides
13 discipline to the process and encourages the quotation of prices that are highly
14 correlated with expected costs.

15 **Q WHAT KINDS OF RECORDS DOES UE HAVE TO MAINTAIN?**

16 A This is addressed in Point No. 7. UE must only maintain records supporting its good
17 faith best estimate and the actual incremental cost.

18 **Q IS THERE A PENALTY TO THE CUSTOMER IF IT MAKES AN ELECTION TO**
19 **CURTAIN, BUT FAILS TO CURTAIL TO THE LEVEL INDICATED?**

20 A As indicated in Point No. 4(d), the customer would be subject to a penalty equal to
21 \$10 per kilowatt times the difference between the committed curtailment and the

1 actual average demand experienced during the curtailment period. This is intended
2 to encourage customers to live up to their commitments.

3 **Q ARE THERE ANY OTHER CHANGES IN THE PRICING, TERMS AND**
4 **CONDITIONS?**

5 A No. As indicated in Point No. 2, the basic demand/energy structure of the rate, and
6 the price relationship to the firm tariff, would be maintained except as explained
7 above.

8 **Q WHAT IS THE RELATIONSHIP BETWEEN THE FIRM RATE AND THE**
9 **INTERRUPTIBLE RATE?**

10 A The energy charges are the same for both the firm and the interruptible service. The
11 demand charge is lower for interruptible service. Specifically, the demand charge
12 applicable to interruptible service is 50% of the demand charge applicable to firm
13 service.

14 **Q IS THIS A TYPICAL RELATIONSHIP?**

15 A Yes. The most typical structure is that the energy charge for the interruptible rate is
16 the same as the energy charge for the firm rate, and the demand charge for
17 interruptible service is a reduced value. This reduced charge for the demand
18 component of the interruptible rate, as compared to the demand component of the
19 firm rate, recognizes that there is no generation capacity investment made to serve
20 interruptible customers. Rather, the level of the demand charge for interruptible
21 service is set to recover the delivery service costs, plus make a reasonable
22 contribution to the recovery of fixed costs associated with generation.

1 This contribution is used to reduce the rates charged to firm customers. By
2 charging some amount of demand charge to interruptible customers, a positive
3 contribution is made, which recognizes the lower quality of service to interruptible
4 customers; and at the same time permits the rates charged to firm service customers
5 to be lower.

6 **Q HOW LONG HAS THE STRUCTURE OF RATE 10M BEEN LIKE THIS?**

7 A To the best of my knowledge, it has been like this for over 25 years.

8 **Q WHAT IS THE DIFFERENCE IN THE DEMAND CHARGES BETWEEN FIRM**
9 **SERVICE AND INTERRUPTIBLE SERVICE?**

10 A On an annual basis, the difference is \$60 per kilowatt. This averages to
11 approximately \$5 per kilowatt-month.

12 **Q IS THERE ANY INDEPENDENT WAY TO CONFIRM THE REASONABLENESS OF**
13 **THIS CREDIT OR DIFFERENTIAL?**

14 A Sometimes, the reasonableness of the interruptible credit is measured by the cost of
15 installing a combustion turbine peaking unit, on the theory that a combustion turbine
16 peaking unit would need to be installed if the interruptible service were not available.

17 In this light, the combustion turbine peaking units that UE is currently installing
18 have a capital cost of approximately \$400 per kilowatt. A carrying charge rate (to
19 recover cost of capital and depreciation) of between 15% and 20% would produce a
20 credit of between \$60 per kilowatt-year and \$80 per kilowatt-year. Accordingly, the
21 interruptible credit that was contained in Rate 10M was, and is, perfectly reasonable.

1 **Q POINT NO. 5 CONTAINS A STATEMENT THAT THE ON-PEAK HOURS WILL BE**
2 **10 AM TO 8 PM, MONDAY THROUGH FRIDAY. PLEASE EXPLAIN THIS**
3 **PROVISION.**

4 **A The current peak period is 10 AM – 10 PM. Cement companies have an ability to**
5 **operate at significantly higher levels than their normal on-peak levels, and do so**
6 **when possible in order to build inventory and meet production schedules. The ability**
7 **to have two additional hours as off-peak was a very important consideration in terms**
8 **of the willingness to increase the number of potential interruptions by allowing up to**
9 **60 additional hours per calendar year in the event of economic conditions.**
10 **Interruptible customers believe that this is something which UE could provide to them**
11 **at little or no cost, because by 8 PM loads, and hourly prices, are significantly below**
12 **their peak values. In fact, the new Rider M (Paragraph 5) states that after 7 PM the**
13 **hourly price is typically less than 60% of the average price for all on-peak hours.**

14 **Q WHAT IS ADDRESSED IN POINT NO. 6?**

15 **A Point No. 6 addresses an item that is not currently covered in the tariff – which is how**
16 **the customer may change the level of its contracted assurance power demand. Rate**
17 **10M provided that the assurance power demand would be increased if the customer**
18 **failed to curtail down to its assurance power level when required to do so, but it does**
19 **not address how the customer might change the assurance power demand level**
20 **because of a change in its operating characteristics. Such change could either**
21 **require an increase, or a decrease, in the level of assurance power demand. Point**
22 **No. 6 is added simply to define how this could occur, and Interruptible Customers**
23 **suggested that the change could be made with 90 days' notice, and that the customer**

1 could not change again any sooner than 12 months following the date of the previous
2 change. This type of provision is frequently contained in tariffs.

3 **Q DID INTERRUPTIBLE CUSTOMERS PRESENT THIS OUTLINE AS A "TAKE IT**
4 **OR LEAVE IT" PROPOSAL TO UE?**

5 **A** No, quite to the contrary. We were careful to explain to UE, and did so on numerous
6 occasions, that this outline was presented for discussion purposes and that
7 Interruptible Customers were perfectly willing to discuss any problems that UE had
8 with these provisions, and to negotiate to a mutually acceptable position.

9 UE did not respond with any particularity to these proposals, and instead
10 stated that it preferred to abandon the traditional concept of interruptible rates, even
11 with the added feature of economic interruptions. Instead, it attempted to persuade
12 Interruptible Customers that Rider M would be an adequate replacement. Despite
13 numerous meetings and discussions, Rider M remains totally unacceptable to
14 Interruptible Customers. They simply cannot utilize it.

15 **Q WHAT IS THE CONSEQUENCE OF INTERRUPTIBLE CUSTOMERS HAVING**
16 **ELECTED TO TAKE FIRM SERVICE?**

17 **A** The first obvious consequence is that they pay more money to UE – their bills go up
18 on an annual basis by about \$2,400,000.

19 The second consequence is that UE no longer has the right to curtail the
20 60,000 kilowatts of interruptible load that Interruptible Customers previously offered to
21 UE in the event that service to firm customers was jeopardized.

22 Given the events of the last two summers, and even of this summer – the
23 ability to curtail load for reliability purposes is extremely valuable, and puts the

1 potential for brownouts or even blackouts of firm load that much further away from
2 reality.

3 **Q WHAT DO INTERRUPTIBLE CUSTOMERS ASK THE COMMISSION TO DO?**

4 A We ask the Commission to put into effect immediately an interruptible rate that
5 contains the combination of features from prior Rate 10M and the seven points
6 outlined on Schedule 1. If this is placed into effect, the three Interruptible Customers
7 who are participants in this proceeding are willing to resume interruptible service.

8 **Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

9 A Yes, it does.

Qualifications of Maurice Brubaker

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 **A Maurice Brubaker. My business mailing address is P. O. Box 412000, 1215 Fern**
3 **Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000.**

4 **Q PLEASE STATE YOUR OCCUPATION.**

5 **A I am a consultant in the field of public utility regulation and President of the firm of**
6 **Brubaker & Associates, Inc., energy, economic and regulatory consultants.**

7 **Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERI-**
8 **ENCE.**

9 **A I was graduated from the University of Missouri in 1965, with a Bachelor's Degree in**
10 **Electrical Engineering. Subsequent to graduation I was employed by the Utilities**
11 **Section of the Engineering and Technology Division of Esso Research and**
12 **Engineering Corporation of Morristown, New Jersey, a subsidiary of Standard Oil of**
13 **New Jersey.**

14 In the Fall of 1965, I enrolled in the Graduate School of Business at
15 Washington University in St. Louis, Missouri. I was graduated in June of 1967 with
16 the Degree of Master of Business Administration. My major field was finance.

17 From March of 1966 until March of 1970, I was employed by Emerson Electric
18 Company in St. Louis. During this time I pursued the Degree of Master of Science in
19 Engineering at Washington University, which I received in June, 1970.

1 In March of 1970, I joined the firm of Drazen Associates, Inc., of St. Louis,
2 Missouri. Since that time I have been engaged in the preparation of numerous
3 studies relating to electric, gas, telephone and water utilities. These studies have
4 included analyses of the cost to serve various types of customers, the design of rates
5 for utility services, cost forecasts, cogeneration rates and determinations of rate base
6 and operating income.

7 I have testified before the Federal Energy Regulatory Commission (FERC),
8 various courts and legislatures, and the state regulatory commissions of Alabama,
9 Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia,
10 Guam, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Michigan, Missouri, New
11 Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania, Rhode Island,
12 South Carolina, South Dakota, Texas, Utah, Virginia, West Virginia, Wisconsin and
13 Wyoming.

14 The firm of Drazen-Brubaker & Associates, Inc. was incorporated in 1972 and
15 assumed the utility rate and economic consulting activities of Drazen Associates, Inc.,
16 founded in 1937. In April, 1995 the firm of Brubaker & Associates, Inc. was formed.
17 It includes most of the former DBA principals and staff. Our staff includes consultants
18 with backgrounds in accounting, engineering, economics, mathematics, computer
19 science and business.

20 We have prepared many studies relating to electric, steam, gas and water
21 properties, including cost of service studies in connection with rate cases and
22 negotiation of contracts for substantial quantities of gas and electricity for industrial
23 use. In these cases, it was necessary to analyze property records, depreciation
24 accrual rates and reserves, rate base determinations, operating revenues, operating
25 expenses, cost of capital and all other elements relating to cost of service.

1 During the past five years, Brubaker & Associates, Inc. and its predecessor
2 firm has participated in over 500 major utility rate cases and statewide generic investi-
3 gations before utility regulatory commissions in 40 states, involving electric, gas,
4 water, and steam rates. Rate cases in which the firm has been involved have
5 included more than 80 of the 100 largest electric utilities and over 30 gas distribution
6 companies and pipelines.

7 In addition to our main office in St. Louis, the firm also has branch offices in
8 Kerrville, Texas; Plano, Texas; Denver, Colorado; and Chicago, Illinois.

PROPOSED INTERRUPTIBLE RATE CONCEPTS
AmerenUE – (Missouri)

1. AmerenUE (UE) can interrupt for reliability purposes, consistent with the current tariff. UE may not interrupt simply because it anticipates the approach of a system peak.
2. The demand/energy structure of the rate, and the price relationship to the firm tariff, is maintained.
3. In addition to the reliability-based interruptions in paragraph 1, UE may, during not more than 60 hours per calendar year, declare a "high cost period." Such a period may be declared only if UE's anticipated incremental cost of generating or purchasing power exceeds \$500 per megawatthour (MWh). The customer has the right to curtail or to continue to purchase power during such periods.
4. UE will provide the customer with notice of the "high cost" period by not later than 8:00 AM on the preceding day. At such time, UE will provide the customer with its good faith best estimate of the incremental cost which will form the basis for the payment or credit.
 - a. The incremental cost amount quoted will be fixed, and not subject to later change.
 - b. The customer will have six hours to notify UE whether it intends to curtail or continue to purchase power. If the customer elects to purchase power, it will be charged a price equal to the quoted incremental cost, plus a mark-up of 1¢ per kilowatthour (kWh), for all kWh actually taken in excess of its assurance power demand.
 - c. If the customer elects to curtail, it shall advise UE of the level of demand to which it shall curtail, which may be equal to, greater than, or less than its assurance power demand level. The customer will receive a payment from UE equal to 90% of the quoted incremental cost times the number of kWh estimated to have been curtailed.
 - d. If the customer makes an election to curtail, but fails to curtail to the level indicated, it shall be subject to a penalty. The penalty will equal \$10 per kW times the difference between the committed curtailment and the actual average demand experienced during the curtailment period.
5. On-peak hours will be 10 AM – 8 PM, Monday through Friday.
6. Customer may change the level of its contracted Assurance Power Demand level with 90 day's notice. After a change has been made, no additional change may become effective sooner than 12 months following the date of change.
7. UE will maintain records supporting its good faith best estimate and the actual incremental cost. These records will be subject to review by the MPSC Staff and by the interruptible customers.