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**Missouri Public
Service Commission**

Exhibit No.:

Issues:

Witness:

Type of Exhibit:

Sponsoring Party:

Company:

Case Nos.:

Cost of Service and Rate Design

Ernest Harwig

Surrebuttal Testimony

Multiple Intervenors

Missouri-American Water Company

WR-2000-281/SR-2000-282

(Consolidated)

Before the

Missouri Public Service Commission

In the matter of Missouri-American Water)
Company's Tariff Sheets Designed to Implement)
General Rate Increases for Water and Sewer)
Service Provided to Customers in the Missouri)
Service Area of the Company)

Case Nos.: WR-2000-281/SR-2000-282
(Consolidated)

Surrebuttal Testimony of

Ernest Harwig

On behalf of

**City of Warrensburg, Missouri
City of Joplin, Missouri
City of St. Peters, Missouri
City of O'Fallon, Missouri
City of Weldon Spring, Missouri
St. Charles County, Missouri
Central Missouri State University
Hawker Energy Products, Inc.
Harmon Industries, Inc.
Stahl Specialty Company
Swisher Mower and Machine Company
Missouri Industrial Energy Consumers
and
St. Joseph Industrial Water Users**

Project 7265/7313
May 2000

BAI
BRUBAKER & ASSOCIATES, INC.

Before the
Missouri Public Service Commission

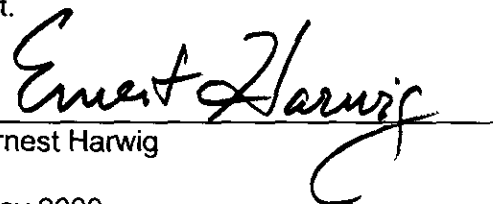
In the matter of Missouri-American Water)	
Company's Tariff Sheets Designed to Implement)	Case Nos.: WR-2000-281/SR-2000-282
General Rate Increases for Water and Sewer)	(Consolidated)
Service Provided to Customers in the Missouri)	
Service Area of the Company)	

Affidavit of Ernest Harwig

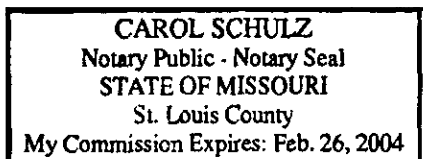
State of Missouri)
) **SS**
County of St. Louis)

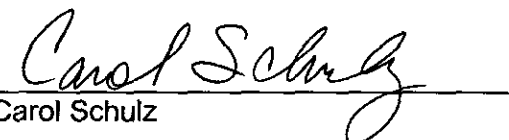
Ernest Harwig, being first duly sworn on his oath, states:

1. My name is Ernest Harwig. My business address is 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000. I am a consultant in the field of public utility regulation with the firm of Brubaker & Associates, Inc.
2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony which has been prepared in written form for introduction into evidence in the above-referenced docket.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.


Ernest Harwig

Subscribed and sworn to before me this 25th day of May 2000.




Carol Schulz

My Commission expires on February 26, 2004.

**Before the
Missouri Public Service Commission**

In the matter of Missouri-American Water)	
Company's Tariff Sheets Designed to Implement)	Case Nos.: WR-2000-281/SR-2000-282
General Rate Increases for Water and Sewer)	(Consolidated)
Service Provided to Customers in the Missouri)	
Service Area of the Company)	

Surrebuttal Testimony of Ernest Harwig

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

2 A Ernest Harwig; 1215 Fern Ridge Parkway, Suite 208; St. Louis, MO 63141-2000.

3 **Q HAVE YOU PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONY IN**
4 **THIS PROCEEDING?**

5 A Yes, I have.

6 **Q WHAT IS THE SUBJECT OF YOUR SURREBUTTAL TESTIMONY?**

7 A I will comment on statements made in the rebuttal testimonies of Mr. James M. Jenkins
8 and Mr. William M. Stout filed on behalf of Missouri-American Water Company (MAWC
9 or Company). I will also comment on statements made in the rebuttal testimony of
10 Wendell Hubbs filed on behalf of the Staff of the Missouri Public Service Commission.
11 Finally, I will respond to statements made by Ms. Hong Hu and Mr. James Busch in
12 rebuttal testimony filed on behalf of the Office of Public Counsel (OPC). My decision not
13 to respond to all statements made in rebuttal testimony by these or other witnesses

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1 should not be construed as agreement with the positions stated in their rebuttal
2 testimonies.

3 **Mr. Jenkins' Testimony**

4 Q ON PAGE 2 OF HIS REBUTTAL TESTIMONY, MR. JENKINS DISCUSSES YOUR
5 THREE-PHASE PLAN PERTAINING TO THE RECOVERY OF PRUDENTLY-
6 INCURRED COSTS ASSOCIATED WITH THE NEW ST. JOSEPH TREATMENT
7 PLANT (SJTP). HE CRITICIZES YOUR PLAN FOR NOT RECOGNIZING A
8 DEFERRAL FOR ANY AMOUNT NOT CURRENTLY RECOVERED IN RATES, AS
9 DOES THE STAFF'S PHASE-IN PLAN. WHAT IS YOUR RESPONSE?

10 A The three-phase plan I propose is not a phase-in plan. Rather, it tracks the progress of
11 treatment plant construction in three separate phases, consistent with the
12 recommendations made by Dr. Charles Morris in his direct testimony. Each phase of
13 construction would be recognized in rates as it is placed in service. Thus, there are no
14 deferrals to be capitalized.

15 **Mr. Stout's Testimony**

16 Q AT PAGES 2 AND 3 OF HIS REBUTTAL TESTIMONY, MR. STOUT CRITICIZES THE
17 ALLOCATION OF CORPORATE COSTS MADE BY OPC WITNESS HU BASED ON
18 THE NUMBER OF CUSTOMERS IN EACH DISTRICT. MR. STOUT CONTENDS
19 THAT THE USE OF THE NUMBER OF CUSTOMERS DOES NOT CONSIDER THE
20 CAUSATIVE BASIS FOR CORPORATE COSTS AND ALLOCATES MORE COSTS
21 TO THE LARGER DISTRICTS THAN IS APPROPRIATE. HE CONCLUDES THAT
22 THE RESULTS OF HER ALLOCATIONS SHOULD NOT BE CONSIDERED IN
23 EVALUATING THE ASSIGNED AND ALLOCATED COSTS OF SERVING EACH
24 DISTRICT. DO YOU AGREE WITH MR. STOUT'S CRITICISM AND CONCLUSION?

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1 A Yes, I do. The causative basis of various corporate costs should be considered in
2 making such allocations to the districts. They should not be allocated on one single
3 factor.

4 Q **AT PAGES 4 THROUGH 7 OF HIS REBUTTAL TESTIMONY, MR. STOUT**
5 **CRITICIZES THE INTRODUCTION OF AN "ECONOMIES OF SCALE" FACTOR BY**
6 **MS. HU IN HER COST OF SERVICE STUDIES. HE STATES AT PAGE 5 THAT MS.**
7 **HU HAS INTRODUCED MARGINAL OR INCREMENTAL COST CONCEPTS INTO**
8 **THE ALLOCATION OF EMBEDDED COSTS, AND THAT THIS PROCEDURE IS**
9 **INCONSISTENT. DO YOU AGREE WITH THIS CRITICISM?**

10 A Yes, I do. Ms. Hu's attempt to graft a marginal cost procedure onto a recognized and
11 accepted method for allocating embedded costs is improper and produces misleading
12 results, as I stated in my rebuttal testimony at page 11.

13 Q **MR. STOUT GOES ON TO SAY THAT MS. HU IS INCONSISTENT IN NOT**
14 **EXTENDING HER LOGIC TO BOTH THE BASE AND THE EXTRA CAPACITY**
15 **PORTIONS OF THE COST. USING THE EXAMPLE OF A WATER MAIN, MR. STOUT**
16 **STATES THAT A LARGE PROPORTION OF THE COST OF A "ZERO-INCH" MAIN**
17 **WOULD BE CONSIDERED A CUSTOMER COST. DO YOU AGREE WITH HIS**
18 **CRITICISM?**

19 A Yes, I do. I made much the same argument at page 10 of my rebuttal testimony.

1 Q AT PAGE 9 OF HIS REBUTTAL TESTIMONY, MR. STOUT STATES THAT THE
2 INTERCLASS SHIFTS PROPOSED BY MR. BUSCH OF THE OPC SHOULD BE
3 REJECTED AS RELYING ON A COST STUDY THAT DOES NOT PRODUCE
4 REASONABLE INDICATIONS OF COST RESPONSIBILITY. DO YOU AGREE WITH
5 THIS CRITICISM?

6 A Yes, I do, as I stated on page 14 of my rebuttal testimony.

7 Q AT PAGE 11 OF HIS REBUTTAL TESTIMONY, MR. STOUT STATES THAT "ANY
8 VARIATION IN THE VALUE OF THIS SERVICE [A SAFE AND RELIABLE PRODUCT]
9 IS RELATIVELY MINOR IN COMPARISON TO THE POTENTIAL TEMPORAL
10 VARIATIONS IN THE COST OF SERVICE. SINGLE TARIFF PRICING (STP) IS FAR
11 MORE CONSISTENT WITH THE VALUE OF SERVICE THAN DSP." WHAT IS YOUR
12 RESPONSE TO HIS STATEMENT?

13 A First, I am not certain what Mr. Stout means when he says that a variation in the value of
14 service is relatively minor in comparison to the potential variations in the cost of
15 providing that service. In any case, it would be difficult to quantify a variation in the
16 "value of service" if he is referring to the quality of water at the tap.

17 More disturbing, however, is Mr. Stout's introduction of the concept of value of
18 service as a basis for setting rates. An important purpose of utility regulation is the
19 setting of rates which are primarily based upon the cost of service, rather than the value
20 of service. Insofar as regulation is designed to prevent abuse of monopoly positions, it
21 prevents a supplier from charging a price based on "what the traffic will bear," in other
22 words, the value of service.

1 Q AT PAGE 12 OF HIS REBUTTAL TESTIMONY, MR. STOUT STATES THAT YOU
2 ARE IGNORING THE FACTS WHEN YOU CRITICIZE THE "AGE OF PLANT"
3 ARGUMENT HE USES AS A JUSTIFICATION FOR STP. WHAT IS YOUR
4 RESPONSE?

5 A It is Mr. Stout who is conveniently ignoring the facts. In his response, he states that St.
6 Charles should go from being a subsidy receiver in the last case to a subsidy giver in
7 this case because its plant is no longer the youngest and most expensive. By contrast,
8 he reasons, St. Joseph should go from a subsidy giver in the last case to a subsidy
9 receiver in this case because its plant is now the youngest. Apart from why these events
10 even justify inter-district subsidies at all, what Mr. Stout also ignores is the magnitude of
11 the subsidy that St. Charles would be forced to pay in this case under the Company's
12 STP proposal. This is shown in Table 1 below.

TABLE 1				
Deviation Above or (Below) Cost (\$000)				
Line	Last Case		This Case	
1	St. Charles	\$(414)	St. Charles	\$ 3,190
2	St. Joseph	\$ 940	St. Joseph	\$(6,614)

13 In the last case, St. Charles received a subsidy of \$414,000. However, in this case,
14 MAWC proposes that St. Charles provide a subsidy of \$3,190,000. At the same time,
15 St. Joseph, which provided excess revenues of \$940,000 due to STP rates in the last
16 case, is now slated to receive a subsidy of \$6,614,000 in this case. Clearly, under STP,
17 the subsidy burden for St. Charles would be far greater than the subsidy it received, and
18 it would remain in a subsidizing position for many years to come. Nonetheless, the
19 magnitude of the subsidy reversal does not dissuade Mr. Stout from stating that "in this

1 case St. Joseph now . . . requires a temporal subsidy, such as the one received by St.
2 Charles."

3 **Q ON PAGE 12 OF MR. STOUT'S REBUTTAL TESTIMONY, HE STATES THAT YOUR**
4 **SEARCH FOR SUFFICIENT INVESTMENT IN THE NEXT FOUR YEARS TO**
5 **REVERSE THE IMPACT OF THE ST. JOSEPH TREATMENT PLANT AS WELL AS**
6 **THE CURRENT SIGNIFICANT INVESTMENTS IN MEXICO, PARKVILLE AND**
7 **WARRENSBURG IS SHORT-SIGHTED, AND THAT PUBLIC POLICY SHOULD BE**
8 **ESTABLISHED WITH A VIEW TO THE LONG-TERM FUTURE AND NOT THE NEXT**
9 **FEW YEARS. WHAT IS YOUR RESPONSE?**

10 **A** Given the magnitude of the investment in the SJTP, it will not be just "the next few years"
11 during which customers in other districts would subsidize St. Joseph under STP rates.
12 Further, as I stated in my direct testimony at pages 6 and 7, Mr. Stout fails to state the
13 length of time that it would take for the other districts to "catch up" to the unit cost of
14 providing water in St. Joseph. Finally, from a customer's perspective, the certain
15 subsidies paid during "the next few years" carry much more weight than the uncertain
16 prospect of becoming the receiver or an indeterminate level of subsidy somewhere in the
17 distant future.

18 **Q AT PAGES 12 AND 13 OF HIS REBUTTAL TESTIMONY, AS IT PERTAINS TO THE**
19 **EFFECT OF TREATMENT REGULATIONS ON THE COST OF PRODUCING WATER,**
20 **MR. STOUT CLAIMS THAT YOU ARE "SHORT-SIGHTED AND NOT MINDFUL OF**
21 **THE TREND TO INCREASING LEVELS OF REGULATION THAT HAVE OCCURRED**
22 **OVER THE PAST 30 YEARS." WHAT IS YOUR RESPONSE?**

23 **A** The conclusions in my direct testimony do not depend on the fact that levels of
24 regulation have increased over the last 30 years. Rather, my point was that neither Mr.

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1 Stout, nor anyone else, is in a position today to predict exactly what the treatment
2 requirements will be in the future. For that reason, they cannot specify what specific
3 measures will have to be taken by each of MAWC's operating districts or what these
4 measures would cost. Even more to the point, a rate order is due in this case in
5 September 2000. These rates must contemplate the costs of treatment technology in
6 place now in the various districts, not on future requirements. At such future time when
7 investments are made to comply with updated treatment standards, the costs should be
8 borne by the customers in the districts which directly benefit from these investments.

9 **Q AT PAGE 13 MR. STOUT STATES THAT THE NEED TO SEEK LARGE INCREASES**
10 **FROM A SINGLE DISTRICT CONSTITUTES A POTENTIAL DISINCENTIVE TO**
11 **PROVIDING THE HIGHEST AND BEST QUALITY SERVICE. WHAT IS YOUR**
12 **RESPONSE?**

13 **A** I do not believe that district-specific pricing constitutes a disincentive. If customers can
14 see the benefits of pure water resulting from *prudent* investments made in their districts,
15 this should minimize potential opposition. This has certainly been the case in
16 Warrensburg.

17 **Q AT PAGE 14 OF HIS REBUTTAL TESTIMONY MR. STOUT STATES THAT THE**
18 **ABILITY TO ABSORB ADDITIONAL COSTS THROUGHOUT THE ENTIRE SYSTEM**
19 **(AS COMPARED TO THE POTENTIAL IMPACT ON SMALLER DISTRICTS) IS GOOD**
20 **PUBLIC POLICY AND SUPPORTS THE USE OF STP. DO YOU AGREE?**

21 **A** No, I do not. The magnitude of the increase in this case drives rates well above the DSP
22 cost of service in several of the other districts and will keep them there for many years to
23 come. In this case, the imposition of STP creates rate shock rather than diminishes it.

Q AT PAGE 14 OF HIS REBUTTAL TESTIMONY, MR. STOUT CRITICIZES YOUR EXPLANATION OF HOW STP ENABLES THE COMPANY TO EXPAND ITS RATE BASE AND BENEFIT ITS SHAREHOLDER. WHAT IS YOUR RESPONSE?

A Mr. Stout claims that the expansion of rate base does not directly benefit the shareholder. He notes that the expansion of rate base requires either the sale of more stock or the issuance of debt, and that each requires an appropriate return. He concludes that the higher amount of return is required to service higher debt or to properly compensate a greater number of shares. It is true that additional securities may need to be issued. However, the larger scale of plant provides additional income for the common stockholder.

Q AT PAGE 15 OF HIS REBUTTAL TESTIMONY, MR. STOUT STATES THAT "ALTHOUGH IT MAY SOUND CORNY, HELPING THE LITTLE GUY IS AS AMERICAN AS APPLE PIE AND IS STILL GOOD PUBLIC POLICY. STP PROMOTES SUCH POLICY, DSP DOES NOT." PLEASE COMMENT.

A In this case, it is quite clear that STP does not unambiguously "help the little guy." It would force ratepayers on fixed incomes to pay rates above cost simply to subsidize the entire spectrum of customers in St. Joseph and other high-cost districts. Moreover, under the Company's STP proposal, all the "little guys" in the Joplin district, who are paying rates above cost already, would pay more, not less, than they do now.

Q AT PAGES 15 AND 16 OF HIS REBUTTAL TESTIMONY, MR. STOUT CLAIMS THAT YOUR PORTRAYAL OF MAWC'S RATE PROPOSAL AS ARBITRARILY PLACING THE BURDEN ON THE SHOULDERS OF A RELATIVELY FEW IS NOT ACCURATE. PLEASE COMMENT.

1 A Mr. Stout conveniently misconstrues my argument. He points out that there are
2 approximately 54,000 customers in Joplin, St. Charles and Warrensburg who are paying
3 the subsidy under STP, while only 41,000 customers in Brunswick, Mexico, Parkville and
4 St. Joseph receive the subsidy. This is certainly not what I was referring to when I said
5 that the burden was being placed on relatively few customers.

6 To put my argument another way, there are only 54,000 customers in the entire
7 state who would be forced to bear the burden of the costs of a water investment which in
8 no way provides service to them, so that rates in St. Joseph and Brunswick are "more
9 affordable." Thus, the other residents of Missouri, who are not customers of Missouri-
10 American, are exempted from this burden.

11 **Q AT PAGES 16 AND 17 OF HIS REBUTTAL TESTIMONY, MR. STOUT ATTEMPTS TO**
12 **PORTRAY THE COMPANY'S PROPOSED STP RATES AS BEING AFFORDABLE.**
13 **WHAT IS YOUR RESPONSE?**

14 A Mr. Stout claims that the monthly bill increase for the system-wide average residential
15 customer will be \$8.84 under the Company's revised revenue requirement claim. He
16 equates this to an increase of 29¢ per day, which is less than the price of a cup of
17 coffee, a can of soda or a lottery ticket.

18 I believe Mr. Stout's testimony trivializes the impact of such an increase on many
19 of MAWC's customers who must exist on fixed incomes. For them, a two-liter bottle of
20 soda or any bottle of shampoo is not an inconsequential decision. Even under the
21 Company's revised proposal, these customers, who must also purchase such items as
22 medical care, housing and food, would see their water bills go up in excess of 40% per
23 month. Mr. Stout's discussion also fails to address the large increase in the cost of
24 water that would be imposed on businesses, manufacturers and public institutions.

1 **Q AT PAGES 18 AND 19 OF HIS REBUTTAL TESTIMONY, MR. STOUT OUTLINES**
2 **ALTERNATIVE RATE PROPOSALS WHICH MITIGATE THE IMPACT OF THE ST.**
3 **JOSEPH TREATMENT PLANT ON THE RATES IN OTHER DISTRICTS. PLEASE**
4 **COMMENT ON THIS.**

5 **A Mr. Stout's alternative rate proposal is similar to the proposal made by MAWC's sister**
6 **company, Illinois-American Water Company, in a rate filing which it has recently made**
7 **before the Illinois Commerce Commission. The overall increase requested by Illinois-**
8 **American is about 9%. However, because it has recently completed and placed in**
9 **service a new treatment plant in its Alton, Illinois District, it is proposing an Alton District**
10 **Source of Supply Charge, under which all volumetric charges will be increased by 25%.**
11 **The overall proposed increase for the Alton District is 27%.**

12 **Q WHAT CONCLUSION DO YOU DRAW FROM THIS?**

13 **A Illinois-American has advocated single tariff pricing in previous cases, and it is not**
14 **abandoning the concept in its current rate filing. Nonetheless, it is proposing to recover**
15 **the costs of the Alton plant from ratepayers in the Alton district.**

16 **Mr. Hubbs' Testimony**

17 **Q AT PAGE 4 OF HIS REBUTTAL TESTIMONY, MR. HUBBS STATES THAT SOME**
18 **LEVEL OF SUBSIDIZATION WILL OCCUR WHETHER THE COST OF SERVICE IS**
19 **DONE ON AN STP OR A DSP BASIS. SHOULD ONE THEN BE INDIFFERENT TO A**
20 **CHOICE BETWEEN STP AND DSP AS RATEMAKING METHODOLOGIES?**

21 **A Absolutely not. The approaches taken by DSP and STP are diametrically opposed when**
22 **it comes to creating relationship between rates and costs. First and foremost, DSP, as**
23 **Mr. Hubbs points out, draws a circle around individual districts. Thus, only the costs of**
24 **providing service in that district form the basis for rates. Second, DSP spreads district-**

1 specific costs to customers in the district on the basis of their usage patterns alone,
2 relative to one another, and not on the basis of usage patterns averaged with one or
3 more additional districts. Thus, DSP equitably allocates and recovers district-specific
4 costs, with the intent of minimizing subsidies among customers.

5 STP, on the other hand, is a rate averaging device, which by its very nature
6 glosses over very real cost differentials and thus creates subsidies. In a nutshell, DSP
7 attempts to identify legitimate cost differentials, while STP obscures them.

8 **Q AT PAGE 7 OF HIS REBUTTAL TESTIMONY, MR. HUBBS STATES THAT HE**
9 **AGREES WITH MR. STOUT'S ARGUMENT THAT ELECTRIC, GAS AND**
10 **TELEPHONE INDUSTRIES USE STP. WHAT IS YOUR RESPONSE?**

11 **A** Strictly speaking, I do not believe that gas, electric and telephone industries employ STP
12 in the sense that it is used in this case. Keep in mind that these utilities are
13 fundamentally different from water utilities in one very important respect: their service
14 territories are regional and often transcend state boundaries, and they are
15 interconnected. Water utilities, on the other hand, are local in their sphere of operations.
16 The customers of an electric utility may receive energy from any number of power
17 plants, and this energy can be sent over various transmission routes. Energy can even
18 originate from a generating station outside the host utility's service territory. Thus,
19 regional pricing is more acceptable for an electric utility. However, water service is
20 usually provided from a relatively nearby source, and its operations are confined to a
21 local area. Thus, it is more practical (and appropriate) to design rates for a water utility
22 on a district-specific basis.

23 If STP were to be practiced in the electric industry in a manner analogous to that
24 proposed by the Company, then rates would be averaged for, say, the Empire District

1 Electric Company with those of AmerenUE. Obviously, this has not been done in
2 Missouri.

3 **Q AT PAGE 9 OF HIS REBUTTAL TESTIMONY, MR. HUBBS STATES THAT HE**
4 **DISAGREES WITH YOUR STATEMENT THAT STP IS AN UNDESIRABLE**
5 **RATEMAKING POLICY. HE POINTS OUT THAT THE COMMISSION REGULATES**
6 **MOST OTHER UTILITY INDUSTRIES IN MISSOURI WITH STP CONCEPTS. WHAT**
7 **IS YOUR RESPONSE?**

8 **A** Mr. Hubbs' disagreement is somewhat surprising, in that he, himself, pointed out the
9 disadvantages of STP earlier in his testimony. Second, as I just stated, I do not believe
10 that the Commission explicitly employs a "STP methodology" when it approves rates for
11 electric, gas and telephone utilities. Even if it did, I do not believe that STP is
12 appropriate for the separate operating districts of MAWC.

13 **Q AT PAGE 9 OF HIS REBUTTAL TESTIMONY, MR. HUBBS STATES THAT HE**
14 **DISAGREES WITH YOUR ASSESSMENTS OF THE ADVANTAGES OF DSP.**
15 **PLEASE COMMENT.**

16 **A** Mr. Hubbs goes on to say that "whenever you assign customers to a rate class instead
17 of having rates for individual customers, subsidization will occur." This is apparently his
18 objection to DSP rates. I would point out, however, that rates for all public utilities have
19 traditionally been designed for customer classes rather than individual customers. It is
20 acknowledged that all customers within a class do not exhibit identical usage patterns.
21 However, they are still considered to be treated fairly in that they are placed in a class
22 with other customers who are most like them in terms of load and usage characteristics.
23 It is the relative homogeneity which creates an acceptable degree of fairness when
24 assigning costs to customers within a particular class. While it is appropriate to

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1 aggregate customers into homogenous groups for cost allocation purposes, it does not
2 follow that it is appropriate to group districts together. The unit cost levels in the various
3 districts vary too widely to justify such a grouping. In point of fact, STP can only serve to
4 aggravate the degree of subsidization among districts. By glossing over district cost
5 differentials and assigning the same peaking factors to customers within a particular
6 class, regardless of size or the district in which they are located, STP creates far more
7 distortion between rates and costs than does DSP. It is entirely inconsistent with the
8 goal of parity between costs and rates, which customer classification is intended to
9 accomplish. Thus, if Mr. Hubbs' goal is to minimize subsidization, DSP is the way to go,
10 as he himself acknowledged earlier at page 4 of his rebuttal testimony.

11 **Q AT PAGE 11 OF HIS REBUTTAL TESTIMONY, MR. HUBBS STATES THAT HE**
12 **GENERALLY DISAGREES WITH YOUR BELIEF THAT DSP ADVANCES THE**
13 **CAUSE OF FISCAL DISCIPLINE. PLEASE RESPOND.**

14 **A** Apparently, Mr. Hubbs believes that fiscal discipline will be enforced by the Commission
15 when it considers the prudence of the Company's various investments after the fact. I
16 would agree that the prospect of significant disallowance of investment by the
17 Commission is a strong inducement for fiscal discipline. However, it is self-evident that
18 the Company would have a harder task to justify a 100% rate increase than it would to
19 justify a 33% rate increase, and that could influence its investment decisions.

20 **Testimony of Ms. Hu**

21 **Q AT PAGE 8 OF HER REBUTTAL TESTIMONY, MS. HU COMPLAINS THAT THE**
22 **COMPANY'S ALLOCATION METHOD (BASE-EXTRA CAPACITY) HAS ALLOCATED**
23 **TOO MUCH COST TO PEAK USAGE SO THAT THE RESIDENTIAL CLASS, BEING**
24 **THE HIGH PEAK USER, IS ALLOCATED A DISPROPORTIONATELY LARGE**

1 **SHARE OF COST. SHE FURTHER COMPLAINS THAT THE STAFF'S COST STUDY**
2 **SUFFERS FROM THE SAME LIMITATION. DO YOU AGREE WITH HER**
3 **ASSERTIONS?**

4 A No, I do not. While I do question the value of Mr. Stout's company-wide cost study and I
5 would also modify some of the functionalization and classification techniques employed
6 by Mr. Hubbs, I still believe that the base-extra capacity method which each of these
7 witnesses has utilized is an appropriate method for allocating costs, and it classifies a
8 reasonable share of costs to the extra capacity cost category.

9 **Q WHY DOES MS. HU FIND FAULT WITH THE BASE-EXTRA CAPACITY METHOD?**

10 A Briefly, Ms. Hu believes that the base-extra capacity method produces results identical
11 to a method that she calls the "pure peak responsibility method." She contends that this
12 method gives inadequate weight to annual water consumption as a cost allocator, and
13 instead allocates costs purely according to customers' peak water usage. Ms. Hu
14 concludes that the Commission should reject any cost study that relies on the base-extra
15 capacity method unless the method is modified in ways which she deems acceptable.

16 **Q MS. HU PRESENTS AN ANALYSIS WHICH PURPORTS TO SHOW THE**
17 **EQUIVALENCE BETWEEN THE BASE-EXTRA CAPACITY METHOD AND A PURE**
18 **PEAK RESPONSIBILITY METHOD. IS HER ANALYSIS CORRECT?**

19 A No. It is simply wrong. Ms. Hu fails to consider that the base-extra capacity method
20 utilizes **system coincident** peak day and peak hour demands to classify costs. At the
21 same time, it utilizes the **noncoincident** peak day and peak hour demands of the
22 individual customer classes to allocate the costs to them. These noncoincident peak
23 demands represent the maximum demands of the customer classes regardless of when
24 they occur. They are not the peak responsibility or contribution to system peak

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1 demands. Thus, the base-extra capacity method simply does not utilize a customer
2 class' contribution to the system peak as a basis for allocating costs to that class.
3 Because the sum of the customer noncoincident demands is not equal to the system
4 peak demand, the equivalence between the two methods which she attempts to
5 demonstrate on her Schedule HH Reb-3 simply does not exist.

6 For example, Table 5B on Page 11 of Ms. Hu's rebuttal testimony shows average
7 daily consumption of 38.3 million gallons. The corresponding maximum day volume is
8 65.1 million gallons, assuming the weight of 0.5882 shown in her Table 5C. However,
9 the sum of the class noncoincident peaks is 70.6 million gallons. This demonstrates that
10 the base-extra capacity method does not solely utilize class contributions that are
11 coincident with the system peak.

12 **Q WHAT CIRCUMSTANCES WOULD HAVE TO OCCUR FOR THE BASE-EXTRA**
13 **CAPACITY METHOD TO PRODUCE RESULTS IDENTICAL TO THE PEAK**
14 **RESPONSIBILITY METHOD?**

15 **A** All customer classes would have to exert their maximum day and maximum hour loads
16 on the system on exactly the same day and the same hour.

17 **Q IS SUCH AN EVENT LIKELY TO OCCUR?**

18 **A** No.

19 **Q HAS ANY EVIDENCE SHOWING SUCH A COINCIDENCE OF CLASS PEAK**
20 **DEMANDS IN ANY OF THE MISSOURI-AMERICAN DISTRICTS BEEN PRESENTED**
21 **IN THIS CASE?**

22 **A** No.

1 **Q DID MS. HU PROVIDE A NUMERICAL EXAMPLE TO SUBSTANTIATE THE**
2 **EQUIVALENCE OF THE TWO METHODS WHICH SHE ALLEGES TO HAVE**
3 **DEMONSTRATED IN HER SCHEDULE HH REB-3?**

4 **A No, she did not.**

5 **Q AT PAGE 13 OF HER REBUTTAL TESTIMONY, MS. HU STATES THAT "THE FACT**
6 **THAT THIS METHOD PRODUCES SIMILAR OR IDENTICAL RESULTS TO A PURE**
7 **PEAK RESPONSIBILITY ALLOCATION METHOD HAS LONG BEEN RECOGNIZED**
8 **BY MANY RESEARCHERS AND REGULATORS IN THE ELECTRICITY AREA. HAS**
9 **MS. HU CITED ANY COMMISSION ORDERS WHICH EXPLICITLY RECOGNIZE THE**
10 **ALLEGED EQUIVALENCE OF THESE TWO METHODS?**

11 **A No, she has not. She has simply provided quotes from testimony filed in an electric case**
12 **and a statement provided to the City of Austin pertaining to a water rate study. In any**
13 **case, the assertions made by these witnesses are erroneous for the same reasons that**
14 **Ms. Hu's exhibit is erroneous.**

15 **Q IN YOUR OPINION, DOES THE BASE-EXTRA CAPACITY METHOD ALLOCATE A**
16 **SIGNIFICANT PROPORTION OF OPERATING AND CAPITAL COSTS ON THE**
17 **BASIS OF AVERAGE DAY OR ANNUAL CONSUMPTION?**

18 **A Yes, it most certainly does. I have personally performed or reviewed dozens of water**
19 **cost of service studies as a regular part of my participation in rate cases and contract**
20 **negotiations. Without exception, the largest proportion of the total cost of service is**
21 **classified to the base, or average day, cost category in these studies. Much smaller**
22 **proportions of total cost are allocated to the maximum day or maximum hour functions.**
23 **Thus, based on my experience, I simply cannot accept Ms. Hu's contention that the**

1 base-extra capacity method is equivalent to a so-called "pure peak responsibility
2 method."

3 **Mr. Busch's Rebuttal Testimony**

4 **Q AT PAGE 7 OF HIS REBUTTAL TESTIMONY MR. BUSCH STATES THAT YOUR**
5 **PROPOSED 35% ANNUAL INCREASE FOR THE FIRST STAGE OF A PHASE-IN IS**
6 **EXCESSIVE. WHAT IS YOUR RESPONSE?**

7 **A** I agree that 35% constitutes a substantial increase above present rates. However, I do
8 believe that rates should be equated to prudently incurred district-specific costs on a
9 fairly rapid basis.

10 **Q AT PAGE 8 OF HIS REBUTTAL TESTIMONY, MR. BUSCH NOW RECOMMENDS**
11 **THAT THE JOPLIN DISTRICT RECEIVE A ZERO PERCENT INCREASE IN ITS**
12 **RATES. WHAT IS YOUR RESPONSE?**

13 **A** This is certainly a step in the right direction, as compared to his earlier recommendation
14 that Joplin receive a 10% rate increase. Still, his new recommendation is made in spite
15 of the fact that, even according to Mr. Busch's own Schedule JAB-R1, Joplin is above
16 cost of service by \$715,000, or nearly 10%.

17 Thus, Mr. Busch's recommendation is unacceptable to Joplin ratepayers. Joplin
18 has been in the position of subsidizing other districts since the last MAWC rate case in
19 1997. This should stop. The desire to mitigate rate shock in other districts is not a
20 sufficient reason to keep Joplin in a subsidizing position; nor is it a reason to force Joplin
21 ratepayers to provide a return on plant which in no way serves their needs for water
22 service.

1 **Q PLEASE COMMENT ON MR. BUSCH'S SCHEDULES JAB-R2 AND JAB-R3.**

2 **A These schedules show how OPC proposes to allocate its phase-in revenues among the**
3 various customer classes in each district. These revenue allocations are based on the
4 cost of service study prepared by Ms. Hu. For the reasons which I have previously
5 outlined, Ms. Hu's cost of service studies are not a reliable guide to customer class cost
6 responsibility. Therefore, the Commission should ignore Mr. Busch's revenue
7 allocations, as they would under-collect revenues from the residential class and over-
8 collect revenues from the industrial and resale classes.

9 **Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

10 **A Yes, it does.**

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