

Exhibit No.:
Issues: Class Cost of Service, Rates
Witness: Hubbs, Wendell R.
Sponsoring Party: MoPSC Staff
Case Nos.: WR-2000-281 & SR-2000-282

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

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Missouri Public
Service Commission

MISSOURI-AMERICAN WATER COMPANY

WATER & SEWER RATE CASE

**CASE NOS. WR-2000-281
& SR-2000-282**

REBUTTAL TESTIMONY

OF

WENDELL R. HUBBS

Jefferson City, Missouri
May, 2000

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1 Missouri State University, Hawker Energy Products, Inc.; Stahl
2 Specialty Company, Swisher Mower and Machine Company;
3 Missouri Industrial Energy Consumers and St. Joseph Industrial
4 Water Users witness Ernest Harwig.

5 I will address these testimonies by the general issues of Single Tariff
6 Pricing, Cost Allocation to Customer Classes and Rate Design.

7
8 **SINGLE TARIFF PRICING**

9 Q. Please discuss the direct testimony of Mr. Stout with regard to the issue of
10 single tariff pricing (STP).

11 A. On pages 14 through 17 of his direct testimony, Mr. Stout supports the
12 continuation of STP by the Company. Mr. Stout lists as the benefits of STP as "long-
13 term stability" of rates, the "commonality of operating characteristics" between districts
14 and the principle of "gradualism" as the reasons for continuing STP for the Company.

15 Q. Do you agree with Mr. Stout with regard to his listed benefits of STP?

16 A. I agree with Mr. Stout that STP provides a certain measure of long-term
17 stability in rates. When a company expands its customer base to include many more
18 customers and their usage, any needed rate increases will provide a measure of longer-
19 term stability.

20 Q. Do you believe that the longer-term stability in rates justifies the
21 continued use of STP?

1 A. No, I do not. I am of the opinion that the major goal of rate making is to
2 design rates to recover the allocated cost of service from those causing those costs to be
3 incurred.

4 I believe that most of the witnesses' testimonies overlook the real the
5 difference between STP and district specific pricing (DSP). Both are valid recovery
6 tools. STP draws its rate design circle around the entire company for allocation of costs
7 to the specific classes. DSP draws its rate design circle around each operating district.
8 Allocation of the total cost of service for each class is performed using either method.
9 The differences in a DSP cost of service by customer class, compared to a STP cost of
10 service by customer class, gives a measure of the differences in the recovery
11 responsibility between the two methods.

12 One of the basic premises for current ratemaking is that customers will be
13 grouped into classes. Rates are not developed for an individual customer based upon the
14 allocated costs attributable to directly serving each customer. Such individually allocated
15 costs can be dramatically different from the class average costs, even though the type and
16 usage of the class has been determined to be homogeneous (for example: Residential
17 Customers).

18 If rates were designed to recover costs allocated to each individual
19 ratepayer, the greatest accuracy for obtaining recovery of rates from those causing the
20 costs to be incurred would result. Allocation of costs to the specific ratepayer is not
21 feasible however, because of the exorbitant amount of time and cost associated with such

1 determinations. Because of this non-feasible allocation method (to individual
2 customers), rate classes are developed and costs are assigned to these classes. Because of
3 the differences (actual and historical) in the facilities used to serve customers and the
4 usage characteristic differentials of customers in the same class, some level of
5 subsidization will occur whenever customers are grouped into classes. Some level of
6 subsidization will occur whether the cost of service is done on a STP or DSP basis. I am
7 of the opinion that where subsidization can be minimized in allocation and rate
8 determination, it should be pursued. Minimizing of subsidization has the effect of more
9 equitably recovering the cost to serve a class of customers from those customers.

10 Contrary to what I believe the position of Mr. Stout to be, I am of the
11 opinion that the recovery of cost by class, because there is less chance for undue
12 subsidization, is more equitably accomplished on a district basis (DSP) instead of a
13 company-wide basis (STP). I am of the opinion that STP can appropriately be used
14 equitably where there are not great relative cost differentials between districts, but that is
15 not the case in this proceeding.

16 Q. On pages 15 and 16 of his direct testimony, Mr. Stout addresses his
17 contention about the operating characteristics of the several districts support single tariff
18 pricing. Do you believe Mr. Stout is correct in saying that the operating characteristics
19 of the several districts support STP?

20 A. No, I do not agree with this statement. I do agree with the statements that
21 Mr. Stout makes with regard to the operating characteristic similarities and differences,

1 expounded on page 15 of his direct testimony, lines 14 through 23. As he states: "The
2 only significant differences in operating characteristics are the sources of supply and
3 treatment processes."

4 I disagree with Mr. Stout where he states: "The increasing pressure from
5 regulators and customers related to the level of treatment will ultimately eliminate this
6 operating characteristic difference. Thus over the long term, the commonality of the
7 operating characteristics support the use of single tariff pricing."

8 I disagree that operating characteristic differences, those of sources of
9 supply and treatment processes, will ultimately be eliminated by increasing pressure from
10 regulators and customers. It appears that just the opposite is occurring regarding pressure
11 from customers.

12 The existing operating characteristics do not justify STP over DSP. The
13 similar operating characteristics listed by Mr. Stout support only the fact that the water is
14 being sourced, treated and delivered in every district with some similar attributes.
15 Operating characteristics by themselves do not address the imbedded district-specific cost
16 differentials, as they relate to company-wide class allocations. The recognition of the
17 relative cost differentials between the different district classes, not the character of the
18 service, is what should be used to determine the validity of using STP rather than DSP.
19 Mr. Stout recognizes that these operating character differentials for the districts exist, but
20 he does not take into consideration the cost-of-service differentials related to the separate
21 districts.

1 On page 16 of his direct testimony, Mr. Stout states: "...the commonality
2 of the operating characteristics supports the use of single tariff pricing." The
3 commonality of operating characteristics support only the fact that water service is being
4 provided with some similar facilities. Commonality of operating characteristics does not
5 appropriately consider the dramatic cost differentials of the operating characteristics that
6 exist between the districts, when trying to determine whether to use STP or DSP. Where
7 relatively large cost differentials between the districts exist, I am of the opinion that DSP
8 should be used to recover the costs from the district that is causing the costs. I am of the
9 opinion that the major goal of rate making is to design rates to recover the allocated cost
10 of service from those causing those costs to be incurred.

11 Q. On pages 16 and 17 of his direct testimony, Mr. Stout addresses his
12 contention that the equivalence of services received in the separate districts supports
13 single tariff pricing. Do you believe Mr. Stout is correct in saying that the equivalence of
14 service received in the several districts supports STP?

15 A. No. I agree that water is supplied in each district, but the cost incurred to
16 deliver that water to the customer is dramatically different for each district. The fact that
17 all these districts are water service oriented does not in and of itself support the use of
18 STP. The fact that the relative cost to deliver this water is dramatically different is the
19 criteria that should be used to justify the use of DSP rather than STP.

1 Q. On page 16 of his direct testimony, lines 18 through 23, Mr. Stout makes
2 the argument that the electric, gas and telephone industries use STP pricing. Do you
3 agree with his statements regarding these other industries?

4 A. Basically, I do. Most electric companies with which I am familiar use a
5 STP approach to ratemaking. It is my understanding that the local service telephone
6 industry also uses a STP approach to ratemaking. The natural gas industry in Missouri is
7 different in that STP is used for all costs associated with the cost of service except for the
8 actual cost of the gas. In the natural gas industry, recovery of the cost of gas is based
9 upon a DSP pricing scenario.

10 Q. On page 17 of his direct testimony, Mr. Stout lists the other cost of service
11 considerations that he says supports STP. Do you agree with his conclusions?

12 A. Mr. Stout points out that many common costs are incurred for the
13 districts, and he points out that the allocation of these common costs do not result in the
14 development of district-specific revenue requirements that reflect precisely the cost of
15 serving each district, particularly if stand-alone costs are considered. Stand-alone costs
16 are not developed for each district. Allocated common costs are valid for determining
17 district-specific cost of service. These allocated common costs are specific and valid for
18 use in developing the cost of service, and are used to spread the economies of such items
19 as centralized billing to the separate districts.

1 Q. On pages 17 and 18 of his direct testimony, Mr. Stout summarizes his
2 findings regarding the cost to serve each district and for single tariff pricing for Missouri-
3 American Water Company. Do you agree with his findings?

4 A. No, I do not. Although I do agree with Mr. Stout with regard to the
5 primary differences in cost between districts, again, I disagree with his statement that two
6 of the three factors are either temporal or subject to elimination resulting from customer
7 and regulatory pressures. I do not believe the cost district differentials resulting from 1)
8 the average age of plant and 2) the level of treatment required will be either temporary or
9 likely to be eliminated by customer and regulatory pressures. Again, customer pressure
10 appears to be calling for DSP instead of STP. This customer pressure is demonstrated by
11 the positions of other parties to this case who are customers of the Company. Even some
12 customers in the St. Joseph District, for example the St. Joseph Industrial Water Users,
13 are arguing for allocation of costs on a district basis. As for regulatory pressure, it is my
14 hope that the Commission determines the regulatory method of rate determination that
15 affords what it determines is the fairest allocation and recovery of costs.

16 Q. Please discuss the testimony of Mr. Harwig with regard to the issue of
17 single tariff pricing.

18 A. Mr. Harwig represents two types of customers. The first type of customer
19 is located in St. Joseph, namely the St. Joseph Industrial Water Users. Mr. Harwig is
20 recommending that DSP be used to allocate all approved costs associated with the new
21 St. Joseph water plant only to the customers located in St. Joseph. He is arguing for

1 increasing the costs allocated to his clients and to all other classes of customers in St.
2 Joseph regarding the new plant.

3 The second type of customer he is representing is located in districts not in
4 the St. Joseph area. Mr. Harwig consistently argues for allocating costs associated with
5 the new St. Joseph plant only to the St. Joseph District using DSP rather than STP.

6 Q. On page 16, line 10, of his direct testimony, Mr. Harwig states that STP is
7 an undesirable ratemaking policy. Do you agree with this statement?

8 A. No, I do not agree. The Commission regulates most other utility
9 industries in the State with single tariff pricing concepts. The same types of issues are in
10 effect in those industries. The Commission has approved STP rates as being just and
11 reasonable for many of the utilities in the State.

12 Q. On pages 16 and 17 of his direct testimony, Mr. Harwig addresses
13 advantages he sees with DSP. Do you agree with his assessments?

14 A. No, I do not. While I agree that a major goal of ratemaking is to have the
15 cost causer be the cost payer, as discussed earlier in this testimony, whenever you assign
16 customers to a rate class instead of having rates for individual customers, subsidization
17 will occur. It is left to the Commission to decide whether the level of that subsidization
18 is unduly preferential and discriminatory. DSP can accomplish assignment of costs to
19 the cost causer, and recovery of costs from this cost causer will be effected if rates are
20 developed to recover the allocated class costs from each of the different classes.

1 Additionally, on a statewide basis, STP can also effect the recovery of costs by the cost
2 causer if rates are developed to recover the allocated costs from the different classes.

3 Q. Mr. Hubbs, can you give an example of DSP not recovering the costs
4 caused by a customer from that customer?

5 A. Yes, I can. Consider a situation, where there are two residential customers
6 in one district, with similar usage. One of the customers lives downtown and is served
7 by a very small portion of main less than 200 yards from the water supply source and
8 treatment plant, with the main close to the plant having been completely depreciated.
9 The other residential customer lives on the outskirts of the city limits and his water
10 service requires five miles of transmission and distribution main to deliver water. The
11 five miles of main used to serve the second customer is relatively new and is nowhere
12 close to being fully depreciated. With DSP both of these customers are going to be
13 charged the same rate for service. Subsidization is going to occur between these two
14 customers, with the downtown customer paying much more than his cost of service on an
15 individual basis. Also, under this DSP scenario, the city limit customer would not come
16 close to paying his appropriately allocated costs. Both STP and DSP contain aspects of
17 subsidization that result from designing rates to recover costs from classes of customers.

18 The instant case is very conspicuous because of the relatively large plant
19 addition in the St. Joseph District, and its impact on rates. To repeat my disagreement
20 with Mr. Harwig, both DSP and STP are inherently imprecise in recovering cost from the
21 cost causer, but class ratemaking is the only manageable administrative tool available.

1 To state my agreement with Mr. Harwig's result, I am of the opinion that the closer you
2 come to allocating costs to the individual customer (on a district basis rather than multi-
3 district basis) the more accurate your results will be as to recovering costs from those
4 who cause the costs.

5 Q. Do you agree with Mr. Harwig's statements on DSP advancing the cause
6 of fiscal discipline, as presented on page 17 of his direct testimony?

7 A. I generally disagree with Mr. Harwig regarding fiscal discipline caused by
8 DSP. The Company currently has STP-type rates and the issue of the prudence of the
9 investment decision is now before the Commission. It is my understanding that the
10 Commission does not monitor every individual investment decision for prudence before
11 it is made and executed in either DSP or STP. I do not believe the Commission will start
12 imposing its managerial investment decisions over those of the Companies. As I
13 understand the way the current system works, prudence is reviewed, after the fact, and in
14 the context of the Company seeking recovery of the consequences of its investment
15 decisions in its rates. Therefore, I do not see DSP as "...the least cost solution to
16 providing safe, reliable and adequate water service." I am of the opinion that the
17 Commission's review and decisions as to what costs to include in subsequently
18 determined rates is the best cost solution for providing safe, reliable and adequate water
19 service, regardless of whether the costs are recovered through DSP or STP.

1 A significant portion of the testimony filed by Mr. Harwig is rebuttal in
2 nature, rather than direct, and I will address his direct-filed rebuttal in my surrebuttal
3 testimony.

4 Q. Please discuss the testimony of Mr. Busch with regard to the issue of
5 single tariff pricing.

6 A. Mr. Busch is recommending a position somewhere between STP and DSP
7 (page 4 of his direct testimony). Mr. Busch states that Public Counsel supports DSP, but
8 he is not recommending setting rates equivalent to district specific costs. Mr. Busch
9 states that rate shock is the reason for not going to DSP at this time. I disagree with the
10 concept of determining an appropriate cost of service for a district and for the classes,
11 and then modifying that determination using an argument and pricing scheme that will
12 maintain the same discriminatory aspects of STP that the parties are using to justify DSP.
13 If DSP is determined appropriate for costing and pricing, movement toward DSP should
14 be implemented. If a phase-in is needed, then the Commission should phase in the
15 appropriately determined cost levels. The Commission should not adopt a position that
16 will continue the undue subsidization, but should go to cost of service. If the
17 Commission finds, as Mr. Busch suggests, that DSP is a better collector of cost from the
18 cost causer, I believe that DSP is what should be used to allocate the district costs. Rate
19 tempering for other reasons like rate shock will be better accomplished by phase-in to the
20 Commission-determined cost of service levels.

1 Q. Please discuss the testimony of Dr. Beecher with regard to the issue of
2 single tariff pricing.

3 A. Dr. Beecher's testimony is informational only, whereby she introduces an
4 EPA paper on single-tariff pricing (STP).

5 Q. She states that STP is a legitimate tool used to regulate multi-system water
6 utilities. Do you agree with her position?

7 A. Yes, I do. STP has been used as a tool to regulate multi-system water
8 utilities. Both STP and DSP are legitimate tools used to regulate multi-system water
9 utilities. Dr. Beecher also points out that the Commission should continue to exercise
10 due diligence in assessing the circumstances appropriate for implementing STP. I also
11 agree with her regarding this position.

12 Q. Has Dr. Beecher made a recommendation of the appropriateness of STP
13 with regards to the circumstances in this proceeding?

14 A. No, she has not.

15
16 **COST ALLOCATION TO CUSTOMER CLASSES**

17 Q. Mr. Hubbs, will you please discuss Mr. Stout's testimony regarding the
18 allocation of costs to the customer classes?

19 A. Yes, I will. Mr. Stout assigned costs to rate classes based on the Base-
20 Extra Capacity Method of rate design, based on Company wide, STP, cost allocations. If
21 the Commission determines that STP is the appropriate pricing basis to use in this

1 proceeding, I am of the opinion that his study should be used to spread the costs to the
2 customer classes. Although in my studies I have applied a few of his class allocators to
3 the elements of cost of service differently than he did, there are no material allocation
4 differentials of his with which I disagree.

5 Q. Please discuss the testimony of Mr. Harwig with regard to the issue of
6 allocation of costs to the customer classes.

7 A. Mr. Harwig in his direct testimony supports DSP cost allocation. His
8 direct testimony does not contain a class cost-of-service allocation for these districts'
9 allocated cost of services. Mr. Harwig has not proposed a class allocation methodology
10 in his direct testimony.

11 Q. Please discuss the testimony of Ms. Hu with regard to the issue of
12 allocation of costs to the customer classes.

13 A. Ms. Hu starts with the Base-Extra Capacity Method of class allocation on
14 a DSP basis. She modifies this method with one major computational difference. As
15 provided on page 4, line 16, through page 6, line 8, of her direct testimony, she makes an
16 "economy of scale adjustment" for the extra capacity-related costs of service. This has
17 the affect of assigning more cost to the base components.

18 Q. Do you agree with this adjustment?

19 A. No. Although scale economies exist, what is termed extra capacity in the
20 Base-Extra Capacity Method of class cost-of-service allocation is essential to providing
21 service to all customers. This extra capacity is not extra in that it is not needed; it is extra

1 in that it is the amount of capacity over average flows. The entire system is needed to
2 supply water service, both base and extra capacity.

3 Ms. Hu states that due to inherent economies of scale, for most major
4 facilities, the construction cost per unit of capacity associated with adding extra peak
5 capacity is substantially less than the unit cost associated with base capacity cost.

6 Allocation of cost under a hypothetical scenario that shows that a base
7 system would have cost more if it had been built by itself, overlooks the fact that the
8 Company builds most of its facilities at the same time to handle the loads that include
9 both the base capacity (average usage) and extra capacity (that capacity over average
10 usage). This scenario also overlooks that no one would design and build a base capacity
11 facility for a utility supplying any type of normal customers. It is not logical to assign
12 more value to the base component of cost of supplying average supply because a certain
13 size of pipe that was not built, nor would ever have be designed to be built, would have
14 cost proportionally more if the system had not been built the way it was. Allocation of
15 the cost of facilities based on class usage and capacities is more logical than shifting cost
16 based on a plant scenario that would never have been designed and built.

17 Ms. Hu's allocation makes the hypothetical assumption that a base system
18 is priced out as if it had been built by itself, without the capacity needed to provide
19 adequate service over this average flow. Her economies-of-scale allocation then reduces
20 the extra capacity allocator by one-half, shifting costs to the base capacity function.

1 Ms. Hu also erred in applying her economies of scale adjustment to all
2 extra capacity functions although she did not assess economy of scale in facilities other
3 than transmission and distribution lines. Such application to all extra capacity functions
4 other than transmission and distribution lines, is as flawed as the application of this factor
5 to only transmission and distribution lines.

6
7 **RATE DESIGN**

8 Q. Mr. Hubbs, please discuss the rate design recommendation of Mr. Stout.

9 A. Mr. Stout states that his proposed rates, with the exception of Commercial
10 and Private Fire Protection classes are better aligned with the cost of service than the
11 revenues under the present rates.

12 Q. Did Mr. Stout go far enough with developing rates to recover the allocated
13 cost of service?

14 A. No, he did not. Recovery of costs allocated to each class can be
15 accomplished by developing separate commodity factors for each class (i.e. - Residential,
16 Commercial, etc.).

17 Q. Please discuss the rate recommendations of Mr. Harwig.

18 A. Mr. Harwig shows only the rates for the St. Joseph District whereby he
19 maintains charging all classes the same commodity charges. Commodity rates should be
20 adjusted by class until they recover the cost of service as determined to be appropriate by
21 the Commission for that class.

1 Q. Please discuss the rate design proposals of Mr. Busch.

2 A. Mr. Busch states on page 7, lines 18 through 21, of his direct testimony
3 that OPC thinks that rates should be set in a manner that would move MAWC's rates
4 away from STP, but also try to mitigate the rate shock that will result from the addition
5 of the new plant in St. Joseph.

6 On page 8, line 5, Mr. Busch starts explaining his proposal. He first states
7 that no district would receive a decrease in rates when another district is receiving an
8 increase in rates.

9 Q. Do you agree with this proposal?

10 A. No, I do not. If the Commission accepts DSP and determines that a
11 district is paying too much for service, I see no reason to force them to keep overpaying
12 for service while other districts are still underpaying for their cost of service. Since
13 under DSP these other districts will not receive any of the impacts related to the St.
14 Joseph plant, there is no reason to mitigate rate shock resulting from the addition of the
15 new plant in St. Joseph. I recommend the Commission bring each district to its cost of
16 service as soon as possible without any consideration as to other districts.

17 Q. Does Mr. Busch have recommendations for the rates for each class in each
18 district?

19 A. Yes, he does. On page 12 of his direct testimony, starting on line 1, he
20 recommends inter-class shifts as an adjustment to the district caps OPC is proposing.
21 This inter-class adjustment is to be calculated as one-half of the difference of the class

1 cost of service percent and the previous year revenue percent. This recommendation
2 appears to be unwieldy and likely to result in hearings for a Commission determination
3 of the appropriate levels of such differences. It also appears as if going one half the way
4 to the cost of service each year will never get you there.

5 The major fault I see with this stance is that it will keep promoting
6 subsidization even after the Commission has determined appropriate class levels of the
7 cost of service. Unlike Mr. Busch's, I recommend rates be determined and implemented
8 for the class cost of services for each district as soon as possible. To continue
9 dramatically overcharge some customers, because some other customers are not going to
10 like paying their cost of service, seems unfair. The Commission should determine the
11 class cost of service and have rates developed to recover that cost as soon as possible,
12 either with or without phase-in.

13 Q. Have you adjusted the computation of your direct testimony to show the
14 impact of the new plant additions including the St. Joseph plant as the parties agreed to
15 do during pre-hearing?

16 A. Yes, I have. Such changes are shown as in the first seven sets of
17 schedules to my rebuttal testimony. Additionally, other adjustments to reflect
18 agreements in the cost of service by Staff and the Company are incorporated. A few
19 minor changes to allocations are affected. For the St. Joseph Schedules WRH, I have
20 included a copy of most of the workpapers used to allocate the cost of service to the

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1 classes and the workpapers used to develop the rates associated with these allocated
2 costs.

3 Q. Have you prepared a cost of service rate design run showing the OPC-
4 recommended level of plant using your class allocation methodology?

5 A. Yes, I have. The St. Joseph run containing allocations with OPC's
6 recommended plant disallowance and related expense adjustments is shown in the eighth
7 (and last) set of schedules to my rebuttal testimony.

8 Q. Does this conclude your prepared rebuttal testimony in this case?

9 A. Yes, it does.

In the Matter of Missouri-American Water Company's)	
Tariff Sheets Designed to Implement General Rate)	Case No. WR-2000-281
Increases for Water and Sewer Service provided to)	Case No. SR-2000-282
customers in the Missouri Service area of the Company)	(Consolidated)

My commission expires _____