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Tariff - Extension Rules
Witness: James A. Merciel, Jr.
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MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

REBUTTAL TESTIMONY

OF

JAMES A. MERCIEL, JR.

BECKER/BECKER DEVELOPMENT

vs.

AQUA MISSOURI, INC.

CASE NO. SC-2007-0044 et al.
(consolidated with SC-2007-0045)

Jefferson City, Missouri
January 2007

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

Jason Becker,
Becker Development Company,

Complainant,

v.

Aqua Missouri, Inc.,

Respondent.

Case No. SC-2007-0044

AFFIDAVIT OF JAMES A. MERCIEL, JR.

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

James A. Merciel, Jr., of lawful age, on his oath states: that he has participated in the preparation of the following Rebuttal Testimony in question and answer form, consisting of 7 pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.


James A. Merciel, Jr.

Subscribed and sworn to before me this 14th day of January, 2007.



SUSAN L. SUNDERMEYER
My Commission Expires
September 21, 2010
Callaway County
Commission #06942086


Notary Public

My commission expires 9-21-10

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1 Missouri, Inc. (the Company), overloading of the treatment facility, and rules regarding
2 expansion of facilities due to additional development. This latter point gets into both the
3 specific issue related to Jason Becker and Becker Development Company (Complainant), and
4 the Company's rules, generally, regarding plant capacity expansion.

5 **Treatment Facility – Technical Aspects**

6 Q. Have you reviewed treatment facility evaluation and flow data submitted by
7 Company witness Robert O. Gaebe?

8 A. Yes.

9 Q. Do you agree that the existing treatment facility is over-capacity, or at least
10 near capacity?

11 A. Yes, I believe that this treatment facility operates at or near capacity. Mr.
12 Gaebe's flow data in his testimony indicates that hydraulic loading, or flow measured in
13 gallons, is more than three times plant capacity, and seldom is less than the design flow of
14 12,600 gallons per day. While I don't doubt the accuracy of the stated data, and that the plant
15 is indeed well over its hydraulic capacity, I believe that it is important to note that pump
16 records that the Company keeps for its water utility serving the same customers indicates
17 substantially less flow. This data is available in the Company's annual reports (the 2006
18 annual report is not yet due nor filed) and indicates monthly pumpage into the distribution
19 system as measured at a water meter in the well house. The Staff has studied this data in the
20 past while this matter was an informal complaint. This data indicates that the sewage
21 discharge from customers' premises is substantially less than the actual flow at the treatment
22 facility, and is under the design flow most days of the year. Some high water-use months
23 show customer use that exceeds the plant capacity. However, the well house meter includes

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1 water that does not flow into the sewer such as leaks, flushing, customer lawn and garden
2 irrigation and car washing. My conclusion, thus, is that customer sewage discharge is not
3 beyond the plant capacity except for perhaps a few days of the year, and sewage actually
4 discharged from customers' premises is a good indication that the organic load placed upon
5 the treatment facility is probably within design capacity.

6 Q. What is the cause of additional flow at the plant?

7 A. The additional flow is from groundwater, lake water, or storm water inflow
8 and infiltration (I and I) into the sanitary sewer. I don't believe that the existence of I and I is
9 really a question, in fact in the attachments with his testimony, Mr. Gaebe discusses the
10 excess water.

11 Q. Is I and I an important matter with regard to plant operations?

12 A. Yes, because the hydraulic load is exceeded, which means that the detention
13 time of the sewage being treated in the facility is reduced. Lagoons such as the Carmel
14 facility are not as adversely affected by excess hydraulic load because of the great volume of
15 water held in the facility, as compared to mechanical treatment facilities which are of much
16 less volume, and which often improperly discharge solids and sludge when hydraulic flow is
17 too great.

18 Q. Is this issue a matter that the developer should have to address?

19 A. No. While it is a legitimate concern of the Company with regard to operations,
20 it is not something with which the customers or developers should have to deal. Handling the
21 I and I, or spending money to identify and correct the sources, is the Company's
22 responsibility.

23

Applicable Tariff Rules for Extensions and Expansion

Q. Can you briefly describe the tariff rules that apply to this situation?

A. Yes. The company's tariff Rule No. 12 is what is commonly called an extension rule. Most sewer utilities have extension rules that require customers or developers to construct or at least pay for new "collecting sewer" pipelines, which are the sewers that are owned by the utility, are often located parallel to streets, and to which customers connect a "service sewer" pipeline which carries sewage from the houses. The Company's extension rule also requires developers, as defined in the tariff, to construction treatment facilities in addition to the collecting sewers for new subdivision development.

Q. Given the considerable history of this issue, do you believe that either the Company is misapplying the tariff, or there may be some other breakdown with regard to the rule?

A. I don't believe it is a matter of misapplication of the tariff rule, at least not to the level of being a violation. The rule contains an option of the developer undertaking the plant construction and conveying it to the Company on a "turnkey" basis, or alternatively the Company undertaking the plant construction at the cost of the developer. The Company's policy seems to have evolved into using this first option exclusively, and it has worked fairly well because the vast majority of development in the Company's service area has involved new subdivision projects that have complete new sewer systems and dedicated treatment facilities. However, the Becker situation involves mixing of existing development, which is not without its history and problems, along with new development. However, the developer has thus been required to make decisions regarding the upgrade a facility he does not own or control to the satisfaction of others, and the result has been a lot of wasted time and money.

Complaint Resolution

Q. What is the reasonable resolution with regard to what treatment capacity should exist in order to provide service to this portion of the Company's service area?

A. I don't have a specific conclusion regarding what type or size of treatment facility should exist to serve this area. I do believe that there are three primary options that can be considered, all with a number of variations. Those options are 1) expand or modify the existing treatment facility, such as by adding a fourth lagoon cell, or adding mechanical equipment such as surface aerators, mechanical aeration units or clarifier units; 2) construct a "parallel" treatment facility that would operate in addition to, but separate from, the existing facility; or, 3) abandon the existing treatment facility and construct a replacement facility with sufficient capacity to serve existing customers as well as a reasonable level of future customers. The first two options, by the current tariff rules, would require the developer to pay for the entire amount of the project that is constructed for his development. However, there are issues in this particular situation that complicate the interpretation and application of the tariff provisions, including the basic question of whether the current facility is "at capacity" and thus cannot support additional connections. The third option would require the developer to pay for his required portion of the facility, while the Company would need to invest in the portion of the facility necessary for existing customers. Considerations for all of the options and their variations should include the ability to meet discharge permit requirements, space availability, capital economics, and operational economics.

Q. Have the Company and the Developer attempted to agree on what needs to be done?

A. After several years' of face-to-face discussions, phone calls, meetings, and technical proposals, many of which have also involved the Company's corporate staff and executives, consulting engineers, DNR, the PSC Staff and some Commissioners, I would say that there has been some attempt at agreement. However, arriving at consensus with regard to an acceptable facility has proven to be a challenge.

Summary and Conclusion

Q. What do you think is the best way to resolve this complaint?

A. I believe the Company needs to take control of what to do with this facility, instead of relying on the Complainant to propose engineering and construction. The planning would be reliant upon a signed agreement as a request for sewer service. However, for this specific situation, a lot of money has already been spent by the Complainant on project planning, for which the Complainant should be credited at least to some extent. Although I think the Company should positively make some decisions and should have done most of the planning and construction at the Complainant's expense, I'm not sure that it is reasonable for the Complainant to bear the cost of starting anew at this point. The problem is that if not born by the Complainant, the cost would be born by the Company, likely really meaning its customers.

Q. Do you believe the Company needs to re-evaluate its tariff rule?

A. Yes, I believe that the Company should not place a developer into a situation similar to this one when an existing treatment facility is upgraded in combination with new development. Unrelated to this case, there is also what I believe is an inequality within the rule, in that developers are required to pay for treatment capacity but individual property owners are not required to do so. However, re-writing the extension rule would not fix the

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1 | current problem. A Contribution-in-aid-of-Construction (CIAC) charge, to be applied to any
2 | new proposed connections whether requested by an individual or a developer, might be one
3 | way for the Company to equitably fund plant construction for all situations. If such a charge
4 | is approved, an option in the extension rule could remain in place allowing developers to
5 | construct new treatment facilities for new subdivisions, when they believe they are in a good
6 | position to do so, in lieu of paying the CIAC for each subdivision lot.

7 | Q. Does this conclude your Rebuttal Testimony?

8 | A. Yes.