Exhibit No.:	
Issues:	Condition of Plant Facilities Customer Pipeline CIAC
Witness:	Martin L. Hummel
Sponsoring Party:	MO PSC Staff
Type of Exhibit:	Rebuttal Testimony
Case No.:	WA-2006-0480
Date Testimony Prepared:	January 5, 2007

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

REBUTTAL TESTIMONY

OF

MARTIN L. HUMMEL

BIG ISLAND WATER & SEWER COMPANY, INC.

CASE NO. WA-2006-0480

Jefferson City, Missouri
January 2007

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Big Island Water & Sewer Company, Inc. for a Certificate of Convenience and Necessity Authorizing It to Construct, Install, Own, Operate, Control, Manage and Maintain a Water and Sewer System for the Public Located in an Unincorporated Area of Camden County, Missouri	)))))))))	Case No. WA-2006-0480

AFFIDAVIT OF MARTIN L. HUMMEL

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Martin L. Hummel, 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 6 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.

Martin L. Hummel
Martin L. Hummel

Subscribed and sworn to before me this 4th day of January, 2007.

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

Susan L. Sundermeyer
Notary Public

My commission expires 9-21-10

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MARTIN L. HUMMEL

BIG ISLAND WATER & SEWER COMPANY, INC.

CASE NO. WA-2006-0480

Q. Please state your name and business address.

A. My name is Martin L. Hummel, and my business address is P.O. Box 360, Jefferson City, Missouri 65102.

Q. By whom are you employed and in what capacity?

A. I am employed by the Missouri Public Service Commission (Commission) as an Engineer in the Water & Sewer Department (W/S Dept) of the Utility Operations Division.

Q. How long have you been employed by the Commission?

A. I have been employed by the Commission since February 1989.

Q. What is your educational background?

A. I received a Bachelor of Science degree in Education-Science and a Bachelor of Science degree in Engineering from the University of Missouri-Columbia.

Q. What is your employment experience?

A. Prior to my employment at the Commission, I worked with the Missouri Department of Natural Resources (DNR) in the Water Pollution Control Program; I worked as a Research Associate on water-related projects with Louisiana State University-Baton Rouge; and as a Project Engineer with a consulting engineering firm, primarily on wastewater treatment.

EXECUTIVE SUMMARY

Q. What is the purpose of your Rebuttal Testimony?

A. The purpose of this testimony is to comment on the condition of the water and sewer facilities proposed to be owned and operated by Big Island Water & Sewer Company, Inc. (BIWS), the appropriate contribution-in-aid-of-construction (CIAC) amounts per connection to apply to pipeline installation and plant facilities, and on monthly rates.

CONTRIBUTIONS IN AID OF CONSTRUCTION

Q. Are you familiar with the facilities and the company's operation?

A. Yes. I have visited the facilities, and I have reviewed information submitted by various parties regarding the facilities.

Q. Have you evaluated what would be an appropriate amount of CIAC for each water connection and sewer connection?

A. Yes. If you take the prudent cost of installing the existing water distribution mains and collecting sewer pipelines, and divide that cost by the number of connections that are to be served by that pipe, you get the appropriate amount per connection necessary to pay the capital cost of installation. The pipelines would then be considered as "contributed plant" in which the utility has no investment. This is what is generally done through the water main and collecting sewer extension rules that are in most tariffs of the water and sewer companies regulated by the Commission.

Q. How would this amount be applied?

A. This would be paid as a CIAC charge for each connection, water or sewer, whether that be for a single residence or involving several properties for a developer. The primary purpose at this stage is to determine a proper pipeline CIAC charge that should apply

to both existing homes and future development connecting to the existing pipeline. Future pipeline extensions should be handled by an extension rule, where the cost is paid either by developers or individual new customers, with a refund to the payers as additional connections are made.

Q. What is the amount that the Staff recommends be used as a pipeline CIAC for the BIWS systems?

A. $595 for each sewer connection and $675 for each water connection. This is derived from evaluating the area designated Big Island Lakesites. This area includes the majority of the existing homes, along with additional available building sites on the Island interior. One can use a plan view of the area to make a good estimate of the number of lots needing connections, and the applicable length of pipe. Much of the rest of the area is undeveloped, or is large tracts of land where the expected number of connections is less certain. For the approximate 17,500 feet of water and sewer pipeline, for the complete loop as presently constructed, I have estimated 278 lots connecting to make contributions to pay for the pipelines. To calculate the per connection contribution, I divided the net cost of the pipeline installations by this number of lots. The net cost for the installation of the pipelines is shown in the rate base worksheet included in the accounting schedules attached to Staff witness Paul Harrison's testimony ($187,770 for the water pipelines and $165,800 for the sewer pipelines).

Q. How should this amount be applied to existing customers and those residents that have paid for the right to connect to these systems in the future?

A. The existing customers and the potential customers that have reserved service connections, and which have paid amounts of $4,800 for sewer and/or $2,000 for water,

should have $595 sewer/$675 water of that amount recognized as paying for the pipelines. Additional amounts may be applied to the cost incurred to install the service sewer and the water service line; also an amount could be held for funding of water meter installation, which often is paid by new customers as a connection charge, and which I believe should apply to new BIWS customers as well. For the purposes of the issuance of certificates to BIWS, the Staff believes these amounts should be set at the water and sewer connection fees proposed by the Company ($1,000 each for water and sewer service). The remainder of what was paid should be refunded, if BIWS is to be set up as most utilities should with stockholder investment funding the source of water supply (well), storage tank, and sewage treatment facility.

Q. Is the service area requested in the application appropriate for proposed facilities and clearly described?

A. The service area includes all of Big Island and a small portion off of the Island. The facilities appear to be adequate at this time to serve this area. The written description will need to be revised to make a user friendly version for a prospective Tariff.

FACILITY-RELATED ISSUES

Q. Are there concerns regarding the facilities that you believe need to be addressed in order for BIWS to provide safe and adequate service?

A. Yes, the following list includes the items of which the Staff is currently aware:

- Define water service line, service connection, water main and point-of-delivery. The "main" definition must include any pipe that has flow for more than one customer, regardless of size, including service connections that serve two customers. The service connection pipe under the road going to a lot should be part of the service connection, operated and maintained by the utility. Also define the collecting sewers, and service sewers, including any service sewers serving more than one customer. As this is a pressure sewer system requiring pump units and septic tanks at each residence, specifications of required pump units and septic tanks along with

maintenance responsibility needs to be prescribed. Much of this definition work can be modeled after the W/S Department's example tariff rules.

- Produce "as-built" drawings showing the location, size, and appurtenances of both the water system and the sewer system. This should include locations of "service connections," "service sewers'" and small diameter pipe that serve more than one home. Some of this may need to be addressed as part of daily operation, such as, adding the location of a section of pipe to "as-built drawings" when exposed during a maintenance excavation.

- There will be leaks on both systems, water and sewer, both of which are under pressure. How will the operator know when they occur, and what is to be the response? The leaks will vary from small leaks near shutoff valves possibly on the customer's side, to a large sewer or water leak or break, saturating the soil around the pipeline and perhaps flowing directly to the lake. Flow measurement capability on the wastewater system must be provided. Pressure monitoring/recording on the wastewater system should be considered.

- A utility owned shutoff valves should be installed for each water service connection and each sewer service connection.

- All valves must be shown on plans and the valve itself in the field marked clearly as either Water or Sewer.

- Water meters should be installed for all new customers, and a meter installation program should be undertaken for existing customers. This system is big enough with the potential of too many excess water use problems to operate efficiently and equitably without meters and on a flat monthly rate indefinitely. Examples of problems are: excess use for lawn watering, leaving water run to prevent freezing of an exposed waterline to a boat dock or in a house that is vacant in winter, filling swimming pools or simply leaving a plumbing fixture leaking. To the extent that any excess drinking water goes to the sewer it also results in additional wastewater treatment costs.

- Establish a water main repair procedure and evaluate the main for the installation of isolation valves, air release valves and flush valves. The valving should be established that enables an efficient repair while limiting the time and number of customers out of service.

- All sewer customers must have a septic tank and an effluent pump. The responsible party for installation, construction inspection, operation, repair, electric power, operational inspections and solids hauling must be designated. It is recommended that the utility be responsible for tank/pump standards, inspections, repair/replacement of pump, and solids hauling. Solids hauling should be based on annual tank inspections, not on a set time period.

- Establish a written tapping procedure to be provided to plumbers making connections. Instructions should clearly state that both water and sewer are the same type and size, and address locating the correct main. If there are any portions of the main that were laid curved and therefore under stress, an appropriate cautionary statement should be included.

- Additional storage capacity is needed on the water system. It is the Staff's understanding that a new standpipe has been planned and the construction permit issued with construction expected in the spring of 2007.

- Evaluate the location and installation of the water service connections, water service lines, and service sewers, with a determination made on a case by case basis whether a specific improvement, eg.separation, should be implemented.

Note: During the pendancy of this case some items have been addressed, such as, leak repair, relocation of main and establishing a drinking water sampling plan.

CUSTOMER RATES

Q. What monthly rates should be approved?

A. Based on Staff witness Paul Harrison's audit, and a reasonable projected number of customers, rates should be set at the amounts shown on the ratemaking income statement included with Mr. Harrison's testimony. Although I believe water meters are important, and metered rates should thus be implemented, the Staff has not studied water usage sufficiently at the time of this rebuttal testimony to determine metered rates, so interim flat rates are being proposed.

Q. Does this conclude your pre-filed direct testimony?

A. Yes, it does.