

State of Florida



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: March 10, 2015

TO: Patti Daniel, Bureau Chief, Bureau of Economic Impact and Rate Design

FROM: Division of Economics (Thompson, Hudson)
Division of Accounting and Finance (Frank, Norris)
Division of Engineering (Buys, King)
Office of the General Counsel (Murphy)

RE: Docket No. 140186-WU – Application for staff-assisted rate case in Brevard County by Brevard Waterworks, Inc.

- STAFF REPORT -

This Staff Report is preliminary in nature. The Commission staff's final recommendation will not be filed until after the customer meeting.

RECEIVED FPSC
15 MAR 16 PM 4:18
COMMISSION
CLERK

Table of Contents

<u>Issue</u>	<u>Description</u>	<u>Page</u>
	Case Background	3
1	Quality of Service (P. Buys)	4
2	Used and Useful (P. Buys)	6
3	Rate Base (Frank).....	7
4	Rate of Return (Frank)	9
5	Test Year Revenues (Thompson).....	10
6	Operating Expense (Frank, P. Buys).....	11
7	Revenue Requirement (Frank)	15
8	Rate Structure and Rates (Thompson)	16
9	Four Year Rate Reduction (Frank, Thompson).....	18
10	Temporary Rates (Frank)	19
11	Proof of Adjustments (Frank)	22
	Schedule No. 1-A Water Rate Base	23
	Schedule No. 1-B Adjustments to Rate Base	24
	Schedule No. 2 Capital Structure	25
	Schedule No. 3-A Water NOI	26
	Schedule No. 3-B Adjustments to NOI.....	27
	Schedule No. 3-C Operation and Maintenance Expense	29
	Schedule No. 4 Water Rates.....	30

Case Background

Brevard Waterworks, Inc. (Brevard Waterworks or Utility) is a Class C utility providing water service to approximately 236 residential customers and 1 general service customer in Brevard County. Effective June 5, 2014, Brevard Waterworks was granted Certificate No. 002-W.¹ The water systems, which were formally owned by Aqua Utilities Florida, Inc. (Aqua), serve two small subdivisions known as Kingswood and Oakwood. The Utility purchases bulk water from Brevard County. According to Brevard Waterworks' 2013 annual report, total gross revenues were \$91,613 and total operating expenses were \$99,350, resulting in a net loss of \$7,737.

On September 29, 2014, Brevard Waterworks filed its application for a staff-assisted rate case. In its application, the Utility requested a test year ended August 31, 2014, for purposes of interim and final rates. Interim rates were approved on November 25, 2014.²

This Staff Report is a **preliminary** analysis of the Utility prepared by the Commission staff to give utility customers and the Utility an advanced look at what staff may be proposing. The final recommendation to the Commission (currently scheduled to be filed July 9, 2015, for the July 21, 2015 Agenda Conference) will be revised as necessary using updated information and results of customer quality of service or other relevant comments received at the customer meeting. The Commission has jurisdiction in this case pursuant to Sections 367.011, 367.0814, 367.101, and 367.121, Florida Statutes (F.S.).

¹ See Order No. PSC-14-0326-PAA-WS, issued June 25, 2014, in Docket No. 130174-WU, In re: Application for approval of transfer of certain water facilities and Certificate No. 002-W of Aqua Utilities Florida, Inc. to Brevard Waterworks, Inc. in Brevard County.

² See Order No. PSC-14-0683-PCO-WU, issued December 10, 2014, in Docket No. 140186-WU, In re: Application for staff-assisted rate case in Brevard County by Brevard Waterworks, Inc.

Issue 1: Is the overall quality of service provided by Brevard Waterworks satisfactory?

Preliminary Recommendation: Staff's recommendation regarding quality of service will not be finalized until after the April 9, 2015 customer meeting. (P. Buys)

Staff Analysis: Pursuant to Rule 25-30.433(1), Florida Administrative Code (F.A.C.), in water and wastewater rate cases, the Commission shall determine the overall quality of service provided by a utility. This is derived from an evaluation of three separate components of the utility operations. These components are the quality of the utility's product, the operational conditions of the utility's plant and facilities, and the utility's attempt to address customer satisfaction. The rule further states that sanitary surveys, outstanding citations, violations, and consent orders on file with Department of Environmental Protection (DEP) and the county health department over the preceding three-year period shall be considered. In addition, input from the DEP and health department officials, and customer comments or complaints will be considered.

Brevard Waterworks' service area is located in Brevard County within the St. Johns River Water Management district and is subject to a year-round irrigation rule. Brevard Waterworks serves customers in two separate service areas of Oakwood and Kingswood subdivisions. The Utility's water system resells finished water that is obtained from Brevard County Utility Services.

Quality of Utility's Product and Operating Condition of the Utility's Plant and Facilities

Staff reviewed the last two DEP Sanitary Survey Reports for both subdivisions, dated September 30, 2013, and May 12, 2010. The deficiencies on both reports were the same for both subdivisions, including failure to keep Consumer Confidence Reports on file for three-years, failure to provide asbestos waiver and results, and failure to establish and implement a cross-connection program. There was a response from the Utility stating that the deficiencies were corrected. The deficiencies list on the 2013 reports included failure to establish and implement a cross-connection control program. A response was e-mailed to DEP in December 2013, with the revised cross-connection program and a statement that the Utility had implemented it. Based on the information above, operating conditions of the Utility's facilities appear to be satisfactory.

Staff reviewed the chemical analysis for both subdivisions with samples dated June 1, 2011. Staff also reviewed the chemical analysis for Brevard County Utility Services with samples dated June 11, 2014. All of the contaminants were below the Maximum Contaminant Level established by DEP. Based on the above, the quality of the finished water product appears to be satisfactory.

The Utility's Attempt to Address Customer Satisfaction

Staff reviewed the PSC's complaint records and found twelve complaints recorded from March 3, 2008 through November 18, 2014. Of the twelve consumer complaints, eleven customers were located in Oakwood and one was located in Kingswood. There were ten complaints in the category of Improper Bills and two in the category of Quality of Service. The Quality of Service complaints included a request for a meter to be moved and a meter to be tested, which is typically associated with Improper Bill complaints. The Improper Bill

complaints included a request to stop billing, inaccurate bills, a request for a meter test, requests for the water to be shut off, and possible inaccurate meter readings. The Utility responded to the complaints by testing the meters, providing leak detection, re-reading the meters, closing the accounts, moving meters at the expense of the Utility, and providing credits when the Utility was in error.

Staff requested copies of complaints filed with the Utility during the test year and four years prior to the test year. The Utility responded that it did not have customer complaint records from the previous owner and has not received any complaints since the transfer of the system in 2013. Staff also requested complaints from DEP for the test year and four years prior. DEP responded that it had not received any complaints against the Utility during that time frame.

Staff will conduct a customer meeting on April 9, 2015, which will give the customers an opportunity to provide specific information regarding the quality of service the Utility provided. All quality of service complaints will be investigated and will be taken into consideration during the preparation of staff's final recommendation. This recommendation is scheduled to be heard by the Commission at the July 9, 2015 Agenda Conference. Staff will reserve its final quality of service determination until after the information obtained at the customer meeting has been thoroughly reviewed.

Summary

Quality of service will be determined at a later date, pending review of comments made at the April 9, 2015 customer meeting.

Issue 2: What is the used and useful percentage (U&U) of Brevard Waterworks' water distribution system?

Preliminary Recommendation: Brevard Waterworks' water distribution system should be considered 100 percent U&U. (P. Buys)

Staff Analysis: The distribution system is a composite network of approximately 17,929 linear feet of four inch asbestos-cement (AC), PVC, and galvanized pipe (14,859 in Oakwood and 3,070 in Kingswood), 779 linear feet of three inch PVC pipe (Kingswood), and 548 linear feet of two inch PVC pipe (424 in Oakwood and 124 in Kingswood). According to the Utility, there are no fire hydrants in either subdivision.

Water Distribution System Used & Useful

The U&U calculation for the distribution system is based on the average customers during the test year plus a growth allowance, pursuant to Rule 25-30.431, F.A.C., divided by the distribution system capacity. The Commission found the distribution system to be 100 percent U&U by Order No. PSC-12-0102-FOF-WS.³ According to the last rate case, the Utility's distribution lines for the Kingswood subdivision were constructed to serve 66 lots (66 equivalent residential connections or ERCs) in the Utility's service territory. There were 66 customers (66 ERCs) at the time of the last rate case. The Commission found no growth allowance. The result ($66/66=102\%$) is 100 percent U&U. The Utility's distribution lines for the Oakwood subdivision were constructed to serve 262 lots (262 ERCs) in the Utility's service territory and there were 281 customers (281 ERCs) at the time of the last rate case. The Commission found no growth allowance. The result ($281/262=107\%$) is greater than 100 percent U&U. Consistent with the last rate case, the distribution system should be considered 100 percent U&U.

Summary

Brevard Waterworks' water distribution system should be considered 100 percent U&U.

³ Order No. PSC-12-0102-FOF-WS, issued March 5, 2012, in Docket No. 100330-WS, In Re: Application for increase in water/wastewater rates in Alachua, Brevard, DeSoto, Hardee, Highlands, Lake, Lee, Marion, Orange, Palm Beach, Pasco, Polk, Putnam, Seminole, Sumter, Volusia, and Washington Counties by Aqua Utilities Florida, Inc.

Issue 3: What is the appropriate average test year rate base for Brevard Waterworks?

Preliminary Recommendation: The appropriate average test year rate base for Brevard Waterworks is \$81,155. (Frank)

Staff Analysis: The appropriate components of rate base include utility plant in service, land and land rights, contributions in aid of construction (CIAC), accumulated depreciation, accumulated amortization of CIAC, and working capital allowance. Brevard Waterworks purchased the water system from Aqua in March 2013. The Commission approved the transfer and set the net book value. Staff selected the test year ended August 31, 2014, for the instant case. A summary of each component of rate base and the recommended adjustments are discussed below.

Utility Plant in Service (UPIS): The Utility recorded a UPIS balance of \$98,963. Staff made an adjustment to the balance of Account No. 301 - Organization Cost due to the misclassification of a cost incurred for the Utility's transfer proceeding. The staff reclassified this expense to Account No. 667 - Regulatory Commission Expense. Staff decreased UPIS by \$750 to reflect the reclassification of this cost. Staff also decreased the UPIS balance by \$593 to reflect an averaging adjustment.

In addition, staff included a pro forma plant project that occurred after the test year. The Utility submitted a request to include a pipe replacement. Along with the request, the Utility provided an invoice totaling \$4,480 for the pipe replacement. Staff verified that there are no corresponding retirements with this pipe replacement. Therefore, staff increased UPIS by \$4,480.

Staff's adjustments to UPIS result in a net increase of \$3,137 (\$4,480-\$593-\$750). Therefore, staff recommends a UPIS balance of \$102,100.

Land & Land Rights: The Utility recorded a test year land balance of \$2,766. Based on staff's review, no adjustments were necessary. Therefore, staff recommends that the appropriate land balance is \$2,766.

Non-Used and Useful (U&U) Plant: As discussed in Issue 2, the Utility's distribution system is considered 100 percent U&U. Therefore, a U&U adjustment is not necessary.

Accumulated Depreciation: Brevard Waterworks recorded a test year accumulated depreciation balance of \$38,099. Staff recalculated accumulated depreciation using the prescribed rates set forth in Rule 25-30.140, F.A.C., and reflected the appropriate depreciation associated with plant additions and retirements. As a result, staff decreased accumulated depreciation by \$23. Staff also decreased the balance by \$2,360 to reflect an averaging adjustment. In addition, staff increased accumulated depreciation by \$136 as a corresponding adjustment to the pro forma pipe replacement. Staff's net adjustment to the accumulated depreciation balance is a decrease of \$2,247 (\$23+\$2,360-\$136). Therefore, staff recommends that the appropriate accumulated depreciation balance is \$35,852.

Contributions In Aid of Construction (CIAC): The Utility recorded a CIAC balance of \$7,803. Based on staff's review, no adjustments were necessary. Therefore, staff's recommended CIAC balance is \$7,803.

Accumulated Amortization of CIAC: The Utility recorded a balance of \$1,967 for accumulated amortization of CIAC. The Utility did not utilize consistent amortization rates over the test year. Staff decreased the balance of accumulated amortization of CIAC by \$21 consistent with the composite depreciation rate set forth in Rule 25-30.140, F.A.C. Staff also decreased this account by \$169 to reflect an averaging adjustment. Staff's adjustment is a decrease of \$190 (\$21+\$169). Therefore, staff's recommended accumulated amortization of CIAC balance is \$1,777.

Working Capital Allowance: The Utility reflected a working capital balance of \$18,834. Working capital is defined as the investor-supplied funds that are necessary to meet operating expenses or going-concern requirement of a utility. Consistent with Rule 25-30.433(2), F.A.C., staff used one-eighth of the operation and maintenance (O&M) expense formula approach to calculate the working capital allowance. Applying this formula, staff recommends a working capital allowance of \$18,167 (based on O&M expense of \$145,338/8). Therefore, working capital should be decreased by \$667.

Rate Base Summary: Based on the foregoing, staff recommends that the appropriate average test year rate base is \$81,155. Rate base is shown on Schedule No. 1-A. The related adjustments are shown on Schedule No. 1-B.

Issue 4: What is the appropriate return on equity and overall rate of return for Brevard Waterworks?

Preliminary Recommendation: The appropriate return on equity (ROE) is 8.74 percent with a range of 7.74 percent to 9.74 percent. The appropriate overall rate of return is 8.21 percent. (Frank)

Staff Analysis: Staff's recommended capital structure for Brevard Waterworks reflects \$78,790 of common equity and \$6,684 of customer deposits. The Utility's capital structure has been reconciled with staff's recommended rate base. The appropriate ROE for the Utility is 8.74 percent based upon the Commission-approved leverage formula currently in effect.⁴ Staff recommends an ROE of 8.74 percent, with a range of 7.74 percent to 9.74 percent, and an overall rate of return of 8.21 percent. The ROE and overall rate of return are shown on Schedule No. 2.

⁴ See Order No. PSC-14-0272-PAA-WS, issued May 29, 2014, in Docket No. 140006-WS, In re: Water and wastewater industry annual reestablishment of authorized range of return on common equity for water and wastewater utilities pursuant to Section 367.081(4)(f), F.S.

Issue 5: What are the appropriate test year revenues for the Utility's water system?

Preliminary Recommendation: The appropriate test year revenues for Brevard Waterworks' water system are \$127,847. (Thompson)

Staff Analysis: Brevard Waterworks recorded total test year revenues of \$115,601, which includes service revenues of \$108,482 and miscellaneous revenues of \$7,119. Based on staff's review of the Utility's billing determinants and the rates that were in effect during the test year, staff determined service revenues should be increased by \$11,139 to reflect annualized test year service revenues of \$119,621⁵. Staff also made an adjustment to miscellaneous revenues to account for initial connection fees that were not recorded in the general ledger. As a result, miscellaneous revenues should be increased by \$1,107 to reflect the appropriate amount of miscellaneous revenues of \$8,226 during the test year. Therefore, staff recommends that the appropriate test year revenues for Brevard Waterworks water system are \$127,847 (\$119,621 + \$8,226). Test year revenues are shown on Schedule No. 3-A.

⁵ The Utility filed a 2014 Index and Pass Thru that become effective on August 26, 2014.

Issue 6: What is the appropriate amount of total operating expense?

Preliminary Recommendation: The appropriate amount of total operating expense for the Utility is \$157,707. (Frank, P. Buys)

Staff Analysis: Brevard Waterworks recorded operating expense of \$160,834 for the test year ended August 31, 2014. The test year operating expenses have been reviewed, including invoices, canceled checks, and other supporting documentation. Staff made several adjustments to the Utility's operating expenses as summarized below.

Salaries – Officers (604) – The Utility recorded salaries – officer's expense of \$9,333 in the test year. The Utility decreased this expense by \$4,333 to remove out-of-period expense. The salary expense is for the CEO of Brevard Waterworks, Mr. Gary Deremer. Based on staff's preliminary review, no adjustment is necessary. As such, staff recommends salaries – officer's expense of \$5,000.

Purchased Water (610) – Rule 25-30.4325, F.A.C., describes Excessive Unaccounted for Water (EUW) as unaccounted for water in excess of ten percent of the amount produced or purchased. When establishing the Rule, the Commission recognized that some uses of water are readily measurable and others are not. Unaccounted for water is all water that is produced or purchased that is not sold, metered or accounted for in the records of the utility. The rule provides that to determine whether adjustments to plant and operating expenses, such as purchased water, purchased electrical power and chemicals are necessary, the Commission will consider all relevant factors as to the reason for EUW, solutions implemented to correct the problem, or whether a proposed solution is economically feasible. The unaccounted for water is calculated by subtracting both the gallons used for other services, such as flushing, and the gallons sold to customers from the total gallons pumped or purchased for the test year.

According to the Utility's application, the Utility purchased 13,821,000 gallons of water and sold 8,062,000 gallons of water to customers. The Utility recorded 637,340 gallons for other uses. The result $([13,821,000 - (8,062,000 + 637,340)] / 13,821,000)$ for unaccounted for water is 37.1 percent, which would mean there is EUW of 27.1 percent. Staff reviewed the Utility's 2013 Annual Report, the purchased water bills from the county, and the audited billing data for gallons sold to verify the information provided in the application.

In an attempt to discover why the EUW is high, Brevard Waterworks has used leak detection devices in order to locate any possible leaks. The Utility also has plans to perform dual tests on the County's water meter and will continue to investigate the distribution system for possible leaks. Also, it is believed the age of the system may be a factor.

Brevard Waterworks indicated that a possible resolution to the EUW would be a complete replacement of all water mains and the distribution system. The Utility estimated the cost to replace the distribution system would be approximately \$835,437, and stated that directional boring is needed because the current mains and distribution system are located in the back of the customers' premises and there is a shallow water table in the area. Moving the water mains from the back of the premises to the front in the right-of-ways would involve installing

new service lines and meters at the customers' expense. Staff is still investigating the EUW situation.

The Utility's records reflect \$107,247 of purchased water expense for the test year. The Utility made an adjustment to increase purchased water expense by \$3,334 to annualize the expense based on new rates that went into effect January 1, 2014. In addition, the Utility decreased purchased water expense by \$29,920 based on its own calculation of an adjustment for EUW. In total, the Utility-adjusted purchased water expense was \$80,661 for the test year.

Staff increased purchased water expense by \$2,449 to account for expenses that should have been accrued during the test year. In addition, the Utility requested a pro forma adjustment to reflect increased 2015 rates for purchased water. Staff verified the support documentation of the increase and calculated the appropriate additional expense. As such, staff increased purchased water expense by \$2,017.

As discussed above, the Utility has EUW of 27.1 percent. Although the Utility correctly applied this percentage when making its own adjustment, it does not reflect staff's additional adjustments to purchased water expense. As such, staff further decreased purchased water expense by \$1,282 to fully reflect the EUW adjustment.

Staff's net adjustment to this account is an increase of \$3,274 ($\$2,449 + \$2,107 - \$1,282$). Therefore, staff recommends a purchased water expense of \$83,935.

Contractual Services – Accounting (632) – The Utility recorded contractual services – accounting expense of \$4,500 for the test year. The Utility reduced the expense by \$2,000 to remove an out-of-period expense. Based on staff's review, no further adjustment is necessary. Therefore, staff recommends contractual services – accounting expense of \$2,500.

Contractual Services - Other (636) – The Utility recorded contractual services – other expense of \$41,188. Staff increased the expense by \$358 in order to annualize an inflationary adjustment made to the contract price in April 2014. Therefore, staff recommends contractual services – other expense of \$41,546.

Based on staff's preliminary review, staff believes the contract between Brevard Waterworks and U.S. Water Corp. serves the Utility and its customers well. However, staff's final recommendation on the prudence of the contract is pending additional analyses.

Insurance Expense (655) – The Utility recorded insurance expense of \$2,125. Staff decreased insurance expense by \$811 to reflect the appropriate test year expense based on support documentation. Staff recommends insurance expense of \$1,314 ($\$2,125 - \811).

Rate Case Expense (666) – The Utility recorded amortized rate case expense of \$260 which is one-fourth of its total requested rate case expense of \$1,040. This includes filing fees, noticing fees, and travel costs. Regarding the instant case, the Utility is required by Rule 25-22.0407, F.A.C., to provide notices to its customers of the customer meeting and notices of interim and final rates in this case. For noticing, staff has estimated \$346 for postage expense, \$36 for envelope expense, and \$212 for copies. This results in \$595 for the noticing requirement. For

travel, the Utility recorded \$225 of travel costs to attend the agenda conference and \$225 of travel costs to a customer meeting. The Utility paid a \$500 rate case filing fee. Staff recommends total rate case expense of \$1,545. Pursuant to Section 367.0816, F.S., rate case expense is amortized over a 4-year period. Therefore, staff recommends amortization rate case expense of \$386 ($\$1,545/4$).

Regulatory Commission Expense - Other (667) – The Utility recorded regulatory commission expense - other of \$100. Staff increased the account by \$188 to reflect the appropriate reclassification and the 4-year amortization of the \$750 filing fee associated with the Utility's transfer proceeding as discussed in Issue 3. Staff recommends regulatory commission expense – other of \$288 ($\$100+\188).

Bad Debt Expense (670) – The Utility recorded bad debt expense of \$18,161. This amount represents the customer accounts receivable balance for accounts outstanding over 60 days as of August 31, 2014. It is Commission practice to use a 3-year average in order to calculate bad debt expense. However, the Utility only has data to reflect a 2-year average. In addition, the amount of bad debt expense at the end of the test year includes uncollectable accounts that should have been written off per the Utility's policy. Before calculating the Utility's bad debt percentage, staff removed any expense associated with uncollectable accounts that should have been written off based on the Utility's own policy. The 2-year average of bad debt expense as a percentage of actual test year revenues results in a bad debt percentage of 7.9 percent. Staff multiplied the bad debt percentage by the annualized test year revenues to develop staff's recommended bad debt expense of \$10,042. Therefore, staff decreased bad debt expense by \$8,119.

Miscellaneous Expense (675) – The Utility recorded miscellaneous expense of \$480. Staff decreased miscellaneous expense by \$347 to properly reclassify property taxes and to remove out-of-period expenses. Staff recommends a miscellaneous expense of \$133 ($\$480-\347).

Operation and Maintenance Expense (O&M Summary) – Based on the above adjustments, O&M expense should be decreased by \$5,332, resulting in total O&M expense of \$145,338. Staff's recommended adjustments to O&M expense are shown on Schedule No. 3-B.

Depreciation Expense – The Utility's records reflect test year depreciation expense of \$4,725. Staff adjusted depreciation expense to remove out-of-period depreciation expense, as well as depreciation expense associated with the plant reclassification addressed in Issue 3. As a result, staff decreased depreciation expense by \$20. Staff also increased depreciation expense by \$136 for a corresponding adjustment associated with the pro forma pipe replacement. Staff's adjustment to depreciation expense is a net increase of \$116. Therefore, staff recommends depreciation expense of \$4,841.

Amortization of CIAC Expense – The Utility's records reflect test year CIAC amortization expense of \$221. Staff decreased amortization of CIAC expense by \$42 to reflect the composite depreciation rate set forth in Rule 25-30.140, F.A.C. Staff also increased amortization of CIAC expense by a net of \$116 to reclassify CIAC amortization expense and to remove out-of-period expense. Staff's net adjustment to amortization of CIAC expense is an increase of \$74. Therefore, staff recommends an amortization of CIAC expense of \$295.

Taxes Other Than Income (TOTI) – The Utility recorded TOTI expense of \$5,659. Staff increased this expense by \$444 to adjust regulatory assessment fees (RAFs), reclassify tangible taxes, and true-up property taxes from 2014 tax bills. Staff also increased this account by \$76 for a corresponding adjustment of the pro-forma pipe replacement. In addition, as discussed in Issue 7, revenues have been increased by \$36,523 to reflect the change in revenue required to cover expenses and allow the recommended rate of return. As a result, TOTI should be increased by \$1,644 to reflect RAFs of 4.5 percent on the increase in revenues. Therefore, staff recommends TOTI of \$7,823 ($\$444 + \$76 + \$1,644$).

Operating Expenses Summary – The application of staff's recommended adjustments to Brevard Waterworks' test year operating expenses results in operating expenses of \$157,707. Operating expenses are shown on Schedule No. 3-A. The related adjustments are shown on Schedule No. 3-B.

Issue 7: What is the appropriate revenue requirement?

Preliminary Recommendation: The appropriate revenue requirement is \$164,370, resulting in an annual increase of \$36,523 (28.57 percent). (Frank)

Staff Analysis: Brevard Waterworks should be allowed an annual increase of \$36,523 (28.57 percent). This will allow the Utility the opportunity to recover its expenses and earn an 8.21 percent return on its water system. The calculation is shown on Table 7-1.

Table 7-1

<u>Water Revenue Requirement</u>	
Adjusted Rate Base	\$81,155
Rate of Return	<u>x 8.21%</u>
Return on Rate Base	\$6,663
Adjusted O&M Expense	145,338
Depreciation Expense	4,841
Amortization Expense	(295)
Taxes Other Than Income	6,180
Test Year RAFs	<u>1,644</u>
Revenue Requirement	\$164,370
Less Adjusted Test Year Revenues	<u>127,847</u>
Annual Increase	<u>\$36,523</u>
Percent Increase	<u>28.57%</u>

Issue 8: What are the appropriate rate structures and rates for Brevard Waterworks' water system?

Preliminary Recommendation: The recommended rate structure and monthly water rates are shown on Schedule No. 4. The Utility should file revised tariff sheets and a proposed customer notice to reflect the Commission-approved rates. The approved rates should be effective for service rendered on or after the stamped approval date on the tariff sheet, pursuant to Rule 25-30.475(1), F.A.C. In addition, the approved rates should not be implemented until staff has approved the proposed customer notice and the notice has been received by the customers. The Utility should provide proof of the date notice was given within 10 days of the date of the notice. (Thompson)

Staff Analysis: The Brevard Waterworks water system is located in Brevard County within the St. Johns River Water Management District. The Utility provides water service to approximately 236 residential customers and 1 general service customer. Approximately 16 percent of the residential customer bills during the test year had zero gallons indicating a non-seasonal customer base. The average residential water demand is 2,891 gallons per month.

Currently, the Utility's residential rate structure consists of a monthly BFC of \$20.69 and a three-tier inclining block rate structure. The rate blocks are: 1) 0-6,000 gallons, 2) 6,001-12,000 gallons and 3) usage in excess of 12,000 gallons. The BFC and gallonage charges are billed monthly. General service customers are billed a BFC by meter size and a gallonage charge. Irrigation customers are billed the residential rates.

Staff performed an analysis of the Utility's billing data in order to evaluate various BFC cost recovery percentages and the appropriate rate structure for the residential water customers. The goal of the evaluation was to select the rate design parameters that: 1) produce the recommended revenue requirement; 2) equitably distribute cost recovery among the utility's customers; 3) establish the appropriate non-discretionary usage threshold for restricting repression; and 4) implement, where appropriate, water conserving rate structures consistent with Commission practice.

Staff recommends that 40 percent of the water revenues should be generated from the BFC, which will provide sufficient revenues to design a gallonage charge that will send a pricing signal to customers using above non-discretionary usage. Based on the most recent census data, the average persons per household served by the Utility is 2.5, which indicates the non-discretionary usage should be set at 4,000 gallons. A review of the customer billing data indicates that approximately 78 percent of customer bills during the test year included 4,000 or fewer gallons per month. The current three-tier inclining block rate structure, which was approved when the Utility was owned by Aqua, appears to be more aggressive than necessary given the customers' usage pattern. Therefore, staff recommends a traditional BFC and gallonage charge rate structure with two tiers. The first tier should include up to 4,000 gallons of estimated non-discretionary water demand. The second tier should include all gallons in excess of 4,000 gallons per month. General service customers should be billed a BFC and uniform gallonage charge. Staff's recommended rate structure is shown on Schedule No. 4.

Staff's recommended rate structure coupled with the revenue increase indicates that a repression adjustment is necessary. A repression adjustment quantifies changes in consumption patterns in response to an increase in price. Customers will typically reduce their discretionary consumption in response to price changes, while non-discretionary consumption remains relatively unresponsive to price changes.

The customer billing data provided by the Utility reflects that approximately 22 percent of total residential consumption is discretionary and, therefore, subject to the effects of repression. Based on a recommended revenue increase of 30.5 percent, after the removal of miscellaneous service revenues, the residential discretionary consumption can be expected to decline by 321,000 gallons resulting in anticipated average residential demand of 2,777 gallons per month. Staff recommends a 4 percent reduction in total residential consumption and corresponding reductions of \$3,316 for purchased water and \$156 for RAFs to reflect the anticipated repression, which results in a post repression revenue requirement of \$152,672.

Based on the foregoing, staff recommends 40 percent of the water revenues be generated from the BFC. The traditional BFC and gallonage charge rate structure with an additional block for the non-discretionary usage threshold of 4,000 gallons should be approved for residential water customers. A 4 percent reduction in total residential consumption and corresponding reductions of \$3,316 for purchased water and \$156 for RAFs should be made to reflect the anticipated repression. General service customers should be billed a BFC and uniform gallonage charge.

The recommended monthly water rates and rate structure are shown on Schedule No. 4. The Utility should file revised tariff sheets and a proposed customer notice to reflect the Commission-approved rates. The approved rates should be effective for service rendered on or after the stamped approval date on the tariff sheet, pursuant to Rule 25-30.475(1), F.A.C. In addition, the approved rates should not be implemented until staff has approved the proposed customer notice and the notice has been received by the customers. The Utility should provide proof of the date notice was given within 10 days of the date of the notice.

Issue 9: What is the appropriate amount by which rates should be reduced in four years after the published effective date to reflect the removal of the amortized rate case expense as required by Section 367.0816 F.S.?

Preliminary Recommendation: The water rates should be reduced as shown on Schedule No. 4, to remove rate case expense grossed-up for regulatory assessment fees and amortized over a four-year period. The decrease in rates should become effective immediately following the expiration of the four-year rate case expense recovery period, pursuant to Section 367.0816, F.S. Brevard Waterworks should be required to file revised tariffs and a proposed customer notice setting forth the lower rates and the reason for the reduction no later than one month prior to the actual date of the required rate reduction. If the Utility files this reduction in conjunction with a price index or pass-through rate adjustment, separate data should be filed for the price index and/or pass-through increase or decrease and the reduction in the rates due to the amortized rate case expense. (Frank, Thompson)

Staff Analysis: Section 367.0816, F.S., requires that the rates be reduced immediately following the expiration of the four-year period by the amount of the rate case expense previously included in rates. The reduction will reflect the removal of revenue associated with the amortization of rate case expense, the associated return in working capital, and the gross-up for RAFs. The total reduction is \$408 for water.

The water rates should be reduced as shown on Schedule No. 4 to remove rate case expense grossed-up for regulatory assessment fees and amortized over a four-year period. The decrease in rates should become effective immediately following the expiration of the four-year rate case expense recovery period, pursuant to Section 367.0816, F.S. Brevard Waterworks should be required to file revised tariffs and a proposed customer notice setting forth the lower rates and the reason for the reduction no later than one month prior to the actual date of the required rate reduction. If the Utility files this reduction in conjunction with a price index or pass-through rate adjustment, separate data should be filed for the price index and/or pass-through increase or decrease and the reduction in the rates due to the amortized rate case expense.

Issue 10: Should the recommended rates be approved for the Utility on a temporary basis, subject to refund with interest, in the event of a protest filed by a party other than the Utility?

Preliminary Recommendation: Yes. Pursuant to Section 367.0814(7), F.S., the recommended rates should be approved for the Utility on a temporary basis, subject to refund with interest, in the event of a protest filed by a party other than the Utility. Brevard Waterworks should file revised tariff sheets and a proposed customer notice to reflect the Commission-approved rates. The approved rates should be effective for service rendered on or after the stamped approval date on the tariff sheet, pursuant to Rule 25-30.475(1), F.A.C. In addition, the temporary rates should not be implemented until staff has approved the proposed notice, and the notice has been received by the customers. Prior to implementation of any temporary rates, the Utility should provide appropriate security. If the recommended rates are approved on a temporary basis, the rates collected by the Utility should be subject to the refund provisions discussed below in the staff analysis. In addition, after the increased rates are in effect, pursuant to Rule 25-30.360(6), F.A.C., the Utility should file reports with the Commission's Office of Commission Clerk no later than the 20th of each month indicating the monthly and total amount of money subject to refund at the end of the preceding month. The report filed should also indicate the status of the security being used to guarantee repayment of any potential refund. (Frank)

Staff Analysis: This recommendation proposes an increase in water rates. A timely protest might delay what may be a justified rate increase resulting in an unrecoverable loss of revenue to the Utility. Therefore, pursuant to Section 367.0814(7), F.S., in the event of a protest filed by a party other than the Utility, staff recommends that the recommended rates be approved as temporary rates. Brevard Waterworks should file revised tariff sheets and a proposed customer notice to reflect the Commission-approved rates. The approved rates should be effective for service rendered on or after the stamped approval date on the tariff sheet, pursuant to Rule 25-30.475(1), F.A.C. In addition, the temporary rates should not be implemented until staff has approved the proposed notice, and the notice has been received by the customers. The recommended rates collected by the Utility should be subject to the refund provisions discussed below.

Brevard Waterworks should be authorized to collect the temporary rates upon staff's approval of an appropriate security for the potential refund and the proposed customer notice. Security should be in the form of a bond or letter of credit in the amount of \$24,363. Alternatively, the Utility could establish an escrow agreement with an independent financial institution.

If Brevard Waterworks chooses a bond as security, the bond should contain wording to the effect that it will be terminated only under the following conditions:

- 1) The Commission approves the rate increase; or,
- 2) If the Commission denies the increase, the Utility shall refund the amount collected that is attributable to the increase.

If Brevard Waterworks chooses a letter of credit as a security, it should contain the following conditions:

- 1) The letter of credit is irrevocable for the period it is in effect, and,
- 2) The letter of credit will be in effect until a final Commission order is rendered, either approving or denying the rate increase.

If security is provided through an escrow agreement, the following conditions should be part of the agreement:

- 1) No monies in the escrow account may be withdrawn by the Utility without the express approval of the Commission;
- 2) The escrow account shall be an interest bearing account;
- 3) If a refund to the customers is required, all interest earned by the escrow account shall be distributed to the customers;
- 4) If a refund to the customers is not required, the interest earned by the escrow account shall revert to Brevard Waterworks;
- 5) All information on the escrow account shall be available from the holder of the escrow account to a Commission representative at all times;
- 6) The amount of revenue subject to refund shall be deposited in the escrow account within seven days of receipt;
- 7) This escrow account is established by the direction of the Florida Public Service Commission for the purpose(s) set forth in its order requiring such account. Pursuant to Cosentino v. Elson, 263 So. 2d 253 (Fla. 3d DCA 1972), escrow accounts are not subject to garnishments;
- 8) The Commission Clerk must be a signatory to the escrow agreement; and,
- 9) The account must specify by whom and on whose behalf such monies were paid.

In no instance should the maintenance and administrative costs associated with the refund be borne by the customers. These costs are the responsibility of, and should be borne by, the Utility. Irrespective of the form of security chosen by Brevard Waterworks, an account of all monies received as a result of the rate increase should be maintained by the Utility. If a refund is ultimately required, it should be paid with interest calculated pursuant to Rule 25-30.360(4), F.A.C.

Brevard Waterworks should maintain a record of the amount of the security, and the amount of revenues that are subject to refund. In addition, after the increased rates are in effect, pursuant to Rule 25-30.360(6), F.A.C., the Utility should file reports with the Commission's Office of Commission Clerk no later than the 20th of each month indicating the monthly and total amount of money subject to refund at the end of the preceding month. The report filed should also indicate the status of the security being used to guarantee repayment of any potential refund.

Issue 11: Should the Utility be required to provide proof, within 90 days of an effective order finalizing this docket, that it has adjusted its books for all applicable National Association of Regulatory Commissioners Uniform System of Accounts (NARUC USOA) primary accounts associated with the Commission approved adjustments?

Preliminary Recommendation: Yes. To ensure that the Utility adjusts its books in accordance with the Commission's decision, Brevard Waterworks should provide proof, within 90 days of the final order in this docket, that the adjustments for all applicable NARUC USOA primary accounts have been made. (Frank)

Staff Analysis: To ensure that the Utility adjusts its books in accordance with the Commission's decision, Brevard Waterworks should provide proof, within 90 days of the final order in this docket, that the adjustments for all applicable NARUC USOA primary accounts have been made.

BREVARD WATERWORKS, INC.		SCHEDULE NO. 1-A	
TEST YEAR ENDED 08/31/14		DOCKET NO. 140186-WU	
SCHEDULE OF WATER RATE BASE			
DESCRIPTION	BALANCE PER UTILITY	STAFF ADJUSTMENTS TO UTIL. BAL.	BALANCE PER STAFF
UTILITY PLANT IN SERVICE	\$98,963	\$3,137	\$102,100
LAND & LAND RIGHTS	2,766	0	2,766
ACCUMULATED DEPRECIATION	(38,099)	2,247	(35,852)
CIAC	(7,803)	0	(7,803)
ACCUMULATED AMORTIZATION OF CIAC	1,967	(190)	1,777
WORKING CAPITAL ALLOWANCE	<u>18,834</u>	<u>(667)</u>	<u>18,167</u>
WATER RATE BASE	<u>\$76,628</u>	<u>\$4,527</u>	<u>\$81,155</u>

BREVARD WATERWORKS, INC.		SCHEDULE NO. 1-B
TEST YEAR ENDED 08/31/14		DOCKET NO. 140186-WU
ADJUSTMENTS TO RATE BASE		
		<u>WATER</u>
<u>UTILITY PLANT IN SERVICE</u>		
1.	To reclassify transfer costs to expense Acct. No. 667.	(\$750)
2.	To reflect an averaging adjustment.	(593)
3.	To include pro forma pipe replacement.	4,480
	Total	<u>\$3,137</u>
<u>ACCUMULATED DEPRECIATION</u>		
1.	To reflect reclassification of plant.	\$23
2.	To reflect an averaging adjustment.	2,360
3.	To reflect pro forma pipe repair.	(136)
	Total	<u>\$2,247</u>
<u>ACCUM AMORTIZATION OF CIAC</u>		
1.	To reflect the appropriate accumulated amortization.	(\$21)
2.	To reflect an averaging adjustment.	(169)
	Total	<u>(\$190)</u>
<u>WORKING CAPITAL ALLOWANCE</u>		
1.	To reflect the appropriate amount of working capital.	<u>(\$667)</u>

BREVARD WATERWORKS, INC.							SCHEDULE NO. 2		
TEST YEAR ENDED 08/31/14							DOCKET NO. 140186-WU		
SCHEDULE OF CAPITAL STRUCTURE									
CAPITAL COMPONENT	PER UTILITY	SPECIFIC ADJUSTMENTS	BALANCE BEFORE PRO RATA ADJUSTMENTS	PRO RATA ADJUSTMENTS	BALANCE PER STAFF	PERCENT OF TOTAL	COST	WEIGHTED COST	
1. TOTAL COMMON EQUITY	\$30,660	\$63,818	\$94,478	(\$15,688)	\$78,790	92.18%	8.74%	8.06%	
2. LONG TERM DEBT		\$0	\$0	\$0	\$0	0.00%	0.00%	0.00%	
3. CUSTOMER DEPOSITS	<u>\$4,132</u>	<u>\$2,552</u>	<u>\$6,684</u>	<u>\$0</u>	<u>\$6,684</u>	<u>7.82%</u>	2.00%	<u>0.16%</u>	
4. TOTAL	<u>\$34,792</u>	<u>\$66,370</u>	<u>\$101,162</u>	<u>(\$15,688)</u>	<u>\$85,474</u>	<u>100.00%</u>		<u>8.21%</u>	
RANGE OF REASONABLENESS						<u>LOW</u>	<u>HIGH</u>		
RETURN ON EQUITY						<u>7.74%</u>	<u>9.74%</u>		
OVERALL RATE OF RETURN						<u>7.29%</u>	<u>9.13%</u>		

BREVARD WATERWORKS, INC. TEST YEAR ENDED 08/31/14 SCHEDULE OF WATER OPERATING INCOME			SCHEDULE NO. 3-A DOCKET NO. 140186-WU		
	TEST YEAR PER UTILITY	STAFF ADJUSTMENTS	STAFF ADJUSTED TEST YEAR	ADJUST. FOR INCREASE	REVENUE REQUIREMENT
1. OPERATING REVENUES	<u>\$115,601</u>	<u>\$12,246</u>	<u>\$127,847</u>	<u>\$36,523</u> 28.57%	<u>\$164,370</u>
OPERATING EXPENSES:					
2. OPERATION & MAINTENANCE	\$150,671	(\$5,332)	\$145,338	\$0	\$145,338
3. DEPRECIATION	4,725	116	4,841	0	4,841
4. CIAC AMORTIZATION EXPENSE	(221)	(74)	(295)	0	(295)
5. TAXES OTHER THAN INCOME	5,659	521	6,180	1,644	7,823
6. INCOME TAXES	<u>0</u>	\$0	<u>0</u>	<u>0</u>	<u>0</u>
7. TOTAL OPERATING EXPENSES	<u>\$160,834</u>	<u>(\$4,770)</u>	<u>\$156,064</u>	<u>\$1,644</u>	<u>\$157,707</u>
8. OPERATING INCOME/(LOSS)	<u>(\$45,233)</u>		<u>(\$28,217)</u>		<u>\$6,663</u>
9. WATER RATE BASE	<u>\$76,628</u>		<u>\$81,155</u>		<u>\$81,155</u>
10. RATE OF RETURN	<u>-59.03%</u>		<u>-34.77%</u>		<u>8.21%</u>

BREVARD WATERWORKS, INC.		SCHEDULE NO. 3-B
TEST YEAR ENDED 08/31/14		DOCKET NO. 140186-WU
ADJUSTMENTS TO OPERATING INCOME		PAGE 1 OF 2
		<u>WATER</u>
OPERATING REVENUES		
1.	To reflect the appropriate test year services revenues.	<u>\$12,246</u>
OPERATION AND MAINTENANCE EXPENSES		
1.	Purchased Water Expense (610)	
a.	To reflect the appropriate expense within the test year.	\$2,449
b.	To annualize the 2015 rate increase.	2,107
c.	To reflect EUW adjustment based on the total annualized expense.	<u>(1,282)</u>
	Total	<u>\$3,274</u>
2.	Contractual Services – Other (636)	
a.	To annualize the expense for the test year.	<u>\$358</u>
3.	Insurance Expense (655)	
a.	To reflect the appropriate balance per supporting documentation.	<u>(\$811)</u>
4.	Rate Case Expense (666)	
a.	To reflect appropriate rate case expense.	<u>\$126</u>
5.	Regulatory Commission Expense-Other (667)	
a.	To reflect appropriate reclassification and amortization of transfer costs.	<u>\$188</u>
6.	Bad Debt Expense (670)	
a.	To reflect appropriate bad debt expense.	<u>(\$8,119)</u>
7.	Miscellaneous Expense (675)	
a.	To properly reclassify property taxes and remove out-of-period expenses.	<u>(\$347)</u>
TOTAL OPERATION & MAINTENANCE ADJUSTMENTS		<u>(\$5,332)</u>

BREVARD WATERWORKS, INC.
TEST YEAR ENDED 08/31/14
ADJUSTMENTS TO OPERATING INCOME

SCHEDULE NO. 3-B
DOCKET NO. 140186-WU
PAGE 2 OF 2

DEPRECIATION EXPENSE

1.	To reflect the reclassification of plant.	(\$20)
2.	To reflect pro forma pipe replacement.	<u>136</u>
	Total	<u>\$116</u>

AMORTIZATION EXPENSE

1.	To reflect the appropriate amortization expense.	\$42
2.	To reclassify and remove out-of-period expense.	<u>(116)</u>
	Total	<u>(\$74)</u>

TAXES OTHER THAN INCOME

1.	To adjust RAFs of test year, reclassify tangible taxes, and true-up property taxes from 2014 tax bills.	\$445
2.	To reflect property taxes associated with pro forma pipe replacement.	<u>76</u>
	Total	<u>\$521</u>

BREVARD WATERWORKS, INC.		SCHEDULE NO. 3-C	
TEST YEAR ENDED 08/31/14		DOCKET NO. 140186-WU	
ANALYSIS OF WATER OPERATION AND MAINTENANCE EXPENSE			
	TOTAL PER UTILITY	STAFF PER ADJUST.	TOTAL PER PER STAFF
(601) SALARIES AND WAGES - EMPLOYEES	\$0	\$0	\$0
(603) SALARIES AND WAGES - OFFICERS	5,000	0	5,000
(604) EMPLOYEE PENSION & BENEFITS	0	0	0
(610) PURCHASED WATER	80,661	3,274	83,935
(615) PURCHASED POWER	0	0	0
(616) FUEL FOR POWER PRODUCTION	0	0	0
(618) CHEMICALS	0	0	0
(620) MATERIALS AND SUPPLIES	0	0	0
(630) CONTRACTUAL SERVICES - BILLING	0	0	0
(631) CONTRACTUAL SERVICES - LEGAL	195	0	195
(635) CONTRACTUAL SERVICES - ACCOUNTING	2,500	0	2,500
(636) CONTRACTUAL SERVICES - OTHER	41,188	358	41,546
(640) RENTS	0	0	0
(650) TRANSPORTATION EXPENSE	0	0	0
(655) INSURANCE EXPENSE - GEN LIABILITY	2,125	(811)	1,314
(665) REGULATORY COMMISSION EXPENSE	260	126	386
(667) REGULATORY COMMISSION EXPENSE-OTHER	100	188	288
(670) BAD DEBT EXPENSE	18,161	(8,119)	10,042
(675) MISCELLANEOUS EXPENSES	<u>480</u>	<u>(347)</u>	<u>133</u>
	<u>\$150,670</u>	<u>(\$5,332)</u>	<u>\$145,338</u>

BREVARD WATERWORKS, INC.		SCHEDULE NO. 4		
TEST YEAR ENDED AUGUST 31, 2014		DOCKET NO. 140186-WU		
MONTHLY WATER RATES		COMMISSION	STAFF	
	RATES AT	APPROVED	PRELIMINARY	4 YEAR
	TIME OF	INTERIM	RECOMMENDED	RATE
	FILING	RATES	RATES	REDUCTION
<u>Residential, Irrigation and General Service</u>				
Base Facility Charge by Meter Size				
5/8" x 3/4"	\$20.69	\$22.86	\$21.48	\$0.06
3/4"	\$31.04	\$34.30	\$32.22	\$0.09
1"	\$51.74	\$57.18	\$53.70	\$0.14
1-1/2"	\$103.47	\$114.34	\$107.40	\$0.29
2"	\$165.56	\$182.96	\$171.84	\$0.46
3"	\$331.14	\$365.94	\$343.68	\$0.92
4"	\$517.40	\$571.78	\$537.00	\$1.44
6"	\$1,034.80	\$1,143.56	\$1,074.00	\$2.87
8"	\$1,655.68	\$1,829.69	\$1,718.40	\$4.60
10"	\$2,380.03	\$2,630.17	\$2,470.20	\$6.61
Charge per 1,000 gallons - Residential and Irrigation				
0 - 6,000 gallons	\$7.07	\$7.81	N/A	N/A
6,001 - 12,000 gallons	\$10.62	\$11.74	N/A	N/A
Over 12,000 gallons	\$14.14	\$15.63	N/A	N/A
0 - 4,000 gallons	N/A	N/A	\$10.79	\$0.03
Over 4,000 gallons	N/A	N/A	\$16.19	\$0.04
Charge per 1,000 gallons - General Service	\$7.93	\$8.76	\$11.75	\$0.03
<u>Private Fire Protection</u>				
Base Facility Charge by Meter Size				
2"	\$13.80	\$15.25	\$14.32	\$0.04
3"	\$27.59	\$30.50	\$28.64	\$0.08
4"	\$43.12	\$47.65	\$44.75	\$0.12
6"	\$86.24	\$95.30	\$89.50	\$0.24
8"	\$137.98	\$152.47	\$143.20	\$0.38
10"	\$198.33	\$219.18	\$205.85	\$0.55
<u>Typical Residential 5/8" x 3/4" Meter Bill Comparison</u>				
4,000 Gallons	\$48.97	\$54.10	\$64.64	
6,000 Gallons	\$63.11	\$69.72	\$97.02	
10,000 Gallons	\$105.59	\$116.68	\$161.78	