

State of Florida



# Public Service Commission

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**FROM:** Division of Economics (Thompson, Hudson, Daniel) *TH*  
Division of Accounting and Finance (Frank, Monroe, Norris, Fletcher) *FR*  
Office of Auditing and Performance Analysis (Small) *AS*  
Division of Engineering (P. Buys, King) *PB*  
Office of the General Counsel (Murphy) *MC*

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

**AGENDA:** 07/21/15 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate (Except for Issues 10, 12, and 13)

**COMMISSIONERS ASSIGNED:** All Commissioners

**PREHEARING OFFICER:** Brown

**CRITICAL DATES:** 02/29/16 (15-Month Effective Date (SARC))

**SPECIAL INSTRUCTIONS:** None

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### 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 subdivisions known as Kingswood and Oakwood in Brevard County. The utility has been in existence since 1971 providing water service. The utility purchases bulk water from Brevard County. According to Brevard Waterworks' 2014 annual report, total gross revenues were \$124,184 and total operating expenses were \$199,610, resulting in a net loss of \$75,426.

Brevard Waterworks' last rate case proceeding was in 2010 prior to the utility being transferred from Aqua Utilities Florida, Inc. (Aqua) to Brevard Waterworks.<sup>1</sup> Aqua's rates were based on a capband methodology in which systems were grouped together based on similar costs to serve with bills capped at a maximum affordability level. The groupings, based on similar costs to serve, were an effort to minimize the level of subsidization among customers.

By Order No. PSC-14-0326-PAA-WS, issued June 25, 2014, the Commission approved the transfer of Certificate No. 002-W from Aqua to Brevard Waterworks.<sup>2</sup> On September 29, 2014, Brevard Waterworks filed its application for the rate increase at issue in the instant docket. 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.<sup>3</sup> The official filing date was established as November 28, 2014.

The Commission has jurisdiction in this case pursuant to Sections 367.011, 367.0814, 367.101, and 367.121, Florida Statutes (F.S.).

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<sup>1</sup>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.*

<sup>2</sup>Order No. PSC-14-0326-PAA-WU, 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.*

<sup>3</sup>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.*

## Discussion of Issues

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

**Recommendation:** No. Staff recommends that the water provided by Brevard Waterworks is satisfactory as it is meeting applicable water quality standards, including primary and secondary standards, as prescribed in the Florida Department of Environmental Protection (DEP) rules. It also appears that the utility has attempted to address customers' concerns. However, staff recommends the operating condition of the water facilities is marginal because of the excessive unaccounted for water addressed in Issue 6. Therefore, staff recommends that the overall quality of service for Brevard Waterworks is marginal. (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's 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 DEP and the county health department will be considered. In addition, input from the DEP and health department officials, and customer comments or complaints over the preceding five-year period shall be considered pursuant to Section 367.0812(1)(c), F.S.

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 May 12, 2010 and September 30, 2013. The deficiencies listed in the 2010 reports were the same for both subdivisions and included 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 listed in the 2013 reports included failure to establish and implement a cross-connection control program. A response from the utility was e-mailed to DEP in December 2013, with the revised cross-connection control program and a statement that it was implemented.

Staff next reviewed the operating conditions of the utility's plant. As discuss in Issue 6, staff believes there are issues with the utility's aging distribution system and facilities resulting in Excessive Unaccounted for Water (EUW) of 26.5 percent. Brevard Waterworks has investigated the EUW, but a specific cause has not been discovered. As such, staff believes the operating conditions of the utility's facilities appear to be marginal.

Staff reviewed the chemical analysis for both subdivisions with samples dated June 1, 2011. Since Brevard Waterworks is a reseller of water, 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**

In order to determine the utility’s attempt to address customer satisfaction, staff reviewed customer complaints and comments from five sources: the Commission’s Consumer Activity Tracking System (CATS), the DEP, the complaints the utility has recorded, the customer meeting, and any correspondence submitted to the Commission Clerk regarding this rate case. A summary of all complaints and comments received during the test year and since the test year (9/1/14 – 6/30/15) is shown in Table 1-1.

**Table 1-1  
 Number of Complaints by Source**

Subject of Complaint	PSC’s Records (CATS)		Utility’s Records		DEP		Docket Correspondence	Customer Meeting
	Test Year	Since Test Year	Test Year	Since Test Year	Test Year	Since Test Year		
Improper Billing/ Billing Related	1			4				3
Quality of Water				1				4
Opposed Rate Increase								4
Condition of Facilities				10				1
<b>Total*</b>	1	0	0	15	0	0	0	12

Source: Document Nos. 06030-14, 02064-15, 02196-15, and 04263-15

\*A complaint may appear more than one time in this table if it meets multiple categories

A customer meeting was held in Mims, Florida on April 9, 2015. Four customers attended the meeting and provided comments. The specific comments made included:

- Opposing the rate increase.
- Low water pressure.
- Questions about usage billing and the base facility charge.
- The water distribution system was not located deep enough.
- Concerns about staining in sinks.

- Concerns about paying to shut off water when not at the premises.

The day after the customer meeting, the utility tested the water pressure at the home of the customer who first brought up the issue. This customer is located at the beginning of distribution system. The utility found the water pressure to be within limits required by DEP and found no leaks. A door tag was left for the customer explaining the findings. In addition, the utility attempted to check the water pressure at the other customers' residences at a later date. These attempts were unsuccessful. At one home, the utility's technician was not allowed access to the meter and at the other home the water was shut off at the meter indicting a vacation status.<sup>4</sup> Brevard Waterworks also responded to all comments that were made at the customer meeting by a letter to staff dated April 13, 2015. In the letter, Brevard Waterworks addressed the questions about usage billing and the base facility charge. In addition, the utility explained that the staining in sinks could be caused by iron corrosion in the service lines. To date, there have not been any additional customer comments filed in this rate case.

Complaints were also reviewed for the four years prior to the test year. The Commission received 11 complaints and DEP did not receive any complaints for this time period. The utility does not have records from the previous owner; therefore, the number of complaints filed prior to the transfer to Brevard could not be determined. Of the 11 Commission complaints, nine complaints were 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 billing, 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.

### **Conclusion**

Staff recommends that the water provided by Brevard Waterworks is satisfactory as it is meeting applicable water quality standards, including primary and secondary standards, as prescribed in DEP rules. It also appears that the utility has attempted to address customers' concerns. However, staff recommends the operating condition of the water facilities is marginal because of the excessive unaccounted for water addressed in Issue 6. Therefore, staff recommends that the overall quality of service for Brevard Waterworks is marginal.

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<sup>4</sup>Even though four customers complained about water pressure issues, two customers reside at the same residence.

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

**Recommendation:** Consistent with Order No. PSC-12-0102-FOF-WS<sup>5</sup>, Brevard Waterworks' water distribution system should be considered 100 percent U&U. (P. Buys)

**Staff Analysis:** Based upon Rules 25-30.431, 25-30.432, and 25-30.4325, F.A.C., the Commission's U&U evaluation of water and wastewater systems includes consideration of the formula-based method and all relevant factors such as prior decisions, conservation, and change in customer base. The formula-based method calculates the customer demand as a percentage of capacity. The customer demand is based on the actual demand in the test period and the estimated demand over the five-year statutory growth period.

The distribution system is a composite network of asbestos-cement (AC), galvanized, and PVC pipes of size and length listed in the table below. According to the utility, there are no fire hydrants in either subdivision.

**Table 2-1**  
**Brevard Waterworks' Distribution System**

	<b>AC, Galvanized, PVC</b>	<b>PVC</b>	<b>PVC</b>
	<b>Four Inch</b>	<b>Three Inch</b>	<b>Two inch</b>
<b>Oakwood</b>	14,859 linear feet		424 linear feet
<b>Kingswood</b>	3,070 linear feet	779 linear feet	124 linear feet

Source: Document No. 01541-15

### **Water Distribution System Used & Useful**

The Commission found the distribution system to be 100 percent U&U by Order No. PSC-12-0102-FOF-WS. There has been no change in circumstances; therefore, in accordance with Commission policy, the water distribution system should continue to be considered 100 percent U&U.

### **Conclusion**

Consistent with Order No. PSC-12-0102-FOF-WS, Brevard Waterworks' water distribution system should be considered 100 percent U&U.

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<sup>5</sup>Id.

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

**Recommendation:** The appropriate average test year rate base for Brevard Waterworks is \$81,694. (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. In that docket, the Commission approved the transfer and set the net book value in 2014.<sup>6</sup> 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 the filing fee incurred for the utility's transfer proceeding. Staff reclassified this expense to Account No. 667 - Regulatory Commission Expense to be amortized over five years in accordance with Rule 25-30.433(8) F.A.C. Staff decreased UPIS by \$750 to reflect the reclassification of this expense. Staff also decreased the UPIS balance by \$593 to reflect an averaging adjustment.

In addition, staff included two pro forma pipe replacements that occurred after the test year. Staff believes that the pro forma additions are reasonable and prudent. For the first pipe replacement, the utility submitted an invoice totaling \$1,285. This invoice is from an outside contractor. For the second pipe replacement, the utility submitted an invoice from US Water Services Corporation (USWSC) totaling \$4,480. This invoice is comprised of multiple invoices from the same outside contractor used for the other pipe replacement project, as well as labor for a USWSC tradesman. An 18 percent mark-up was applied to the outside contractor's invoices for labor and supplies but not for the USWSC labor.

USWSC provided a schedule of service fees for maintenance and repairs that exceed \$400 and are therefore not covered under the USWSC contract with the utility. According to the schedule, an 18 percent mark-up is applied to the actual costs of materials and supplies provided by USWSC for these types of maintenance and repairs. Therefore, staff believes the 18 percent mark-up was incorrectly applied to the outside contractor's labor and supplies. Staff decreased the invoice by \$630 to remove the 18 percent mark-up applied to the outside contractor's invoices. Staff verified that there are no corresponding retirements with these pipe replacements. Therefore, staff increased UPIS by \$5,134 for the two pro forma pipe replacements.

Staff's adjustments to UPIS result in a net increase of \$3,791 (-\$750-\$593+\$5,134). Therefore, staff recommends a UPIS balance of \$102,754.

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<sup>6</sup> Id.



### **Land & Land Rights**

The utility recorded a test year land balance of \$2,766. Based on staff's review, no adjustments are necessary. Therefore, staff recommends that the appropriate land balance is \$2,766.

### **Non-Used and Useful 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 \$156 as a corresponding adjustment to the pro forma pipe replacements. Staff's net adjustment to the accumulated depreciation balance is a decrease of \$2,227 ( $\$23 + \$2,360 - \$156$ ). Therefore, staff recommends that the appropriate accumulated depreciation balance is \$35,872.

### **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 apply consistent amortization rates over the test year. Staff decreased the balance of accumulated amortization of CIAC by \$21 consistent with the prescribed rates 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 \$18,071 (based on O&M expense of \$144,569/8). The total adjusted amount is a decrease of \$763.

### **Rate Base Conclusion**

Based on the foregoing, staff recommends that the appropriate average test year rate base is \$81,694. 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?

**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 8.19 percent. (Frank)

**Staff Analysis:** The recommended capital structure reconciled to rate base for Brevard Waterworks reflects \$76,296 of common equity and \$5,398 of customer deposits. The appropriate ROE for the utility is 8.74 percent based upon the Commission-approved leverage formula currently in effect.<sup>7</sup> 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 8.19 percent. The ROE and overall rate of return are shown on Schedule No. 2.

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<sup>7</sup>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?

**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 included 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 \$119,621.<sup>8</sup> Staff also made an adjustment to miscellaneous revenues to impute initial connection charges that were not assessed to new accounts. 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.

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<sup>8</sup>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?

**Recommendation:** The appropriate amount of operating expense for the utility is \$156,936. (Monroe, 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 were reviewed, including invoices, canceled checks, and other supporting documentation. Staff made several adjustments to the utility's operating expenses as summarized below.

## **Operation & Maintenance (O&M) Expense**

### ***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 in order 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.

During the test year, the utility purchased 13,821,000 gallons of water, sold 8,135,000 gallons of water to customers, and recorded 637,340 gallons for other uses. The result  $([13,821,000 - (8,135,000 + 637,340)] / 13,821,000)$  is 36.5 percent unaccounted for water, which means 26.5 percent is EUW. In an attempt to determine the cause of the EUW, Brevard Waterworks:

- Contacted the Florida Rural Water Association (FRWA) and Water Management District (WMD). The WMD recommended that Brevard Waterworks use the traditional leak detection methodologies, which includes ultrasonic acoustic detection and zone pressure tests.
- Attempted to locate leaks on or about February 19, 2014, May 19, 2014, July 24, 2014, September 30, 2014, December 18, 2014, and December 30, 2014, using the same leak detection device that the FRWA utilizes. Brevard Waterworks indicated that 100 percent of the distribution lines were checked and only one service leak was found.
- Conducted dye tests, walked the drainage ditches, and tested for fluoride in 2014. Testing for fluoride in the water flowing to the drainage ditches would determine if the water is coming directly from the distribution system. The utility determined all water flowing to the drainage ditches was not from the distribution systems.
- Noted that all meters were replaced by the previous owner in 2008 and are read remotely. Also, all meters were again checked and tested in September 2014, and all were found to be reading accurately. Therefore, it does not appear the EUW is related to the meters.

As noted in Issue 1, Brevard Waterworks resells Brevard County's water. The County's meter was calibrated in June 2014. Also, the meter was checked by a representative for Sunstate Meters in November 2014. The Sunstate representative found that both of the meter registers were correct. In addition, the representative stated that he has never seen this type of meter over-register when both of the registers are correct. As such, Brevard Waterworks decided that it was not necessary to incur additional expense or inconvenience customers to undertake further testing of the County's meter.

The utility has asked the Commission to not make any adjustments for EUW. The utility believes that the only solution to the EUW is to replace the entire aging infrastructure. However due to the financial burden it would place on the customers, the utility proposes to not make an unaccounted for water adjustment at this time. Rule 25-30.4325(10), F.A.C., gives the Commission discretion to determine whether an adjustment to plant operating expenses for EUW should be made after considering all relevant factors as to the reason for EUW, solutions implemented to correct the problem, or whether a proposed solution is economically feasible. Brevard Waterworks stated in its response to staff's fourth data request that:

If the Commission elects to make an unaccounted for water adjustment the utility would be left with two options:

- A. Move forward with the replacement and request rates to recover the prudently incurred costs, or
- B. Abandon the utility and let the county take over.

The replacement of the water mains and distribution systems would be in the Oakwood subdivision. The Oakwood subdivision system has been in service since 1971 and the AC and galvanized pipes are past their useful lives of 35 and 33 years per Rule 25-30.140(2) (a), F.A.C. Because of the age of the AC and galvanized pipes, these pipes are prone to corrosion, leaks, and reduction of the diameter. The utility provided an estimate that shows the cost to replace the distribution system would be approximately \$835,437. A significant portion of the cost, approximately \$627,000, is for directional boring. Directional boring is necessary, according to the utility, 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 at the customers' expense. An estimate of these customer costs was not provided.

Staff notes that the utility did not initially request replacement of Oakwood's distribution system as a pro forma project. However, on March 19, 2015, in response to staff's fourth data request the utility stated that it requests recovery of "this pro forma replacement costs if the Commission ultimately decides to make the unaccounted for water" adjustment. Brevard Waterworks believes that if it does not receive recovery for the replacement of Oakwood's distribution system, the utility would absorb approximately \$40,000 in unrecoverable purchased water cost, which would leave it financially burdened.

As noted above, the Commission has the discretion to determine whether an adjustment to plant operating expenses for EUW should be made after considering all relevant factors. Staff believes an adjustment of 26.5 percent is appropriate for the reasons listed below:

1. Brevard Waterworks acknowledges that historically the Oakwood system has had a high level of unaccounted for water. As such, this appears to be a known, ongoing issue for the utility.
2. If the Commission does not make the adjustment, customers would be paying for the EUW and the utility would be made whole. Staff believes this would give the utility little incentive to move forward to find a reasonable and economically feasible solution to the problem.
3. Since the utility's request to not make an adjustment for EUW does not include a proposal for when the issue would be brought back before the Commission, the customers should not be required to pay for purchased water they do not use until the utility decides otherwise.

Last, it is not known if the utility's proposed solution (i.e., replacement of the Oakwood distribution system at a cost of approximately \$835,437) is reasonable or economically feasible based on the data provided. The utility did not provide a complete pro forma proposal. Specifically, there was only one quote provided and staff prefers three bids for comparison in price, equipment, and labor. Also, the utility did not provide any plan on how and when this replacement would occur. For instance, does the entire system need to be replaced at one time or can it be completed in phases? Aside from the age of the AC and galvanized pipes, there is no documentation supporting that the entire distribution system needs to be replaced. It is also not known if all or just part of the customers in Oakwood would need to have their meters relocated and at what cost.

Staff acknowledges Brevard Waterworks' efforts to discover the cause of the unaccounted for water. However, the fact remains that the utility is not able to account for over 5 million gallons of water annually and customers should not be required to pay for this. Therefore, staff recommends that a 26.5 percent adjustment to purchased water be made for EUW. Last, staff notes that if and when the utility finds the cause of the EUW, the proposed solution may be reviewed by the Commission in a limited proceeding.

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 purchase water expense by \$29,920 based on its own calculation of an adjustment for excessive unaccounted for water (EUW). In total, the utility-adjusted purchased water expense was \$80,661 ( $\$107,247 + \$3,334 - \$29,920$ ) 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 \$2,107. In addition, staff further decreased purchased water expense by \$591 to fully reflect the EUW adjustment.

Staff's net adjustment to this account is an increase of \$3,965 (\$2,449+\$2,107-\$591). Therefore, staff recommends a purchased water expense of \$84,626 (\$80,661+\$3,695).

***Contractual Services - Other (636)***

The utility recorded contractual services – other expense of \$41,188. Staff increased the expense by \$358 to annualize an increase in the monthly contract price during the test year based on a change in the Consumer Price Index. Staff decreased the expense by \$976 to reduce expenses for fuel, vehicle maintenance, and overtime that were incorrectly estimated in the contract's administrative costs, consistent with recent dockets involving sister utilities. Staff's adjustments to contractual services – other total a decrease of \$618 (\$358-\$976). Therefore, staff recommends contractual services – other expense of \$40,570 (\$41,188-\$618).

Based on its review, staff believes the contract between Brevard Waterworks and USWSC serves the utility and its customers well. USWSC provided the cost model used as the basis for the utility's contractual services expense. Staff reviewed the model and found that no further adjustments were necessary. Although the utility is a reseller, it is still a time intensive system given its issues with problematic infrastructure and the collection efforts for bad debt. Brevard Waterworks customers benefit from the quality of service provided by the current USWSC contract, a caliber that would be difficult to attain on a stand alone basis.

In addition, the utility incurs certain fixed costs inherent with the operation of any water utility such as daily testing, maintenance, and billing/meter reading which are all provided by USWSC at an amount lower than actual cost. For purposes of allocating costs, USWSC has included an additional 1,000 ERCs in its allocation of costs to regulated utilities in order to account for potential acquisitions in the future. As such, the USWSC contractual services – other expense is lower than the cost of services if they were provided on a stand alone basis. In conclusion, staff believes that the contract is reasonable and necessary to maintain quality water service to Brevard Waterworks customers.

***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 amortization of 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 traveling 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 calculated \$346 for postage expense, \$36 for envelope expense, and \$188 for copies. This results in \$571 for the noticing requirement. For travel, the utility recorded \$225 of travel costs to attend the agenda conference and provided \$301 of invoices for travel costs to the customer meeting. The utility paid a \$1,000 rate case filing fee. Staff recommends

total rate case expense of \$2,097 (\$571+\$225+\$301+\$1,000). Pursuant to Section 367.0816, F.S., rate case expense is amortized over a four-year period. Therefore, staff recommends amortization of rate case expense in the amount of \$524 (\$2,097/4). Staff recommends rate case expense be increased by \$264 (\$524-\$260) to reflect the appropriate costs of noticing, travel, and the filing fee.

As noted in the case background, the utility's last rate case proceeding was in 2010 prior to the utility being transferred from Aqua to Brevard Waterworks. Under its former ownership, a four-year rate reduction would have been necessary in March of 2016. However, this reduction is no longer necessary with the transfer of ownership. As such, staff verified that the instant docket does not include any amortization of rate case expense associated with proceedings under its prior ownership.

#### ***Regulatory Commission Expense - Other (667)***

The utility recorded regulatory commission expense - other expense of \$100. Staff increased the account by \$150 to reflect the appropriate reclassification and the five-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 expense of \$250 (\$100+\$150).

#### ***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 three-year average in order to calculate bad debt expense. The utility provided aging reports used to calculate bad debt expense for 2013, 2014, and through April 30, 2015. Staff annualized the amount of bad debt expense incurred by the utility for the test year based on the most recent data available and used it to calculate the three-year average of bad debt expense. Before calculating the utility's bad debt percentage, staff removed any out of period expense and expense associated with accounts outstanding for less than 60 days. Following this methodology, the three-year average of bad debt expense is \$9,457. Therefore, staff decreased bad debt expense by \$8,704 (\$18,161-\$9,457).

#### ***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-test-year expenses. Staff recommends a miscellaneous expense of \$133 (\$480-\$347).

#### ***Operation and Maintenance Expense (O&M Conclusion)***

Based on the above adjustments, O&M expense should be decreased by \$6,101, resulting in total O&M expense of \$144,569. 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 \$19. Staff also increased depreciation expense by \$156 associated with



the pro forma pipe replacement. Staff's adjustment to depreciation expense is a net increase of \$137 (-\$19+\$156). Therefore, staff recommends depreciation expense of \$4,862 (\$4,725+\$137).

**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 prescribed rates set forth in Rule 25-30.140, F.A.C. Staff also increased amortization of CIAC expense by \$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 (-\$42+\$116). Therefore, staff recommends an amortization of CIAC expense of \$295 (\$221+\$74).

**Taxes Other Than Income (TOTI)**

The utility recorded TOTI expense of \$5,659. Staff increased this expense by \$445 to reflect the appropriate test-year regulatory assessment fees (RAFs) based on adjusted test-year revenues, reclassification of tangible taxes, and true-up of property taxes from 2014 tax bills. Staff also increased this account by \$87 associated with the pro forma pipe replacement. In addition, as discussed in Issue 7, revenues have been increased by \$35,780 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 \$1,610 to reflect RAFs of 4.5 percent on the increase in revenues. Staff's net adjustment to TOTI is an increase of \$2,142 (\$445+\$87+\$1,610). Therefore, staff recommends TOTI of \$7,801 (\$5,659+\$2,142).

**Operating Expenses Conclusion**

The application of staff's recommended adjustments to Brevard Waterworks test year operating expenses results in operating expenses of \$156,936. 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?

**Recommendation:** The appropriate revenue requirement is \$163,627, resulting in an annual increase of \$35,780 (27.99 percent). (Frank)

**Staff Analysis:** Brevard Waterworks should be allowed an annual increase of \$35,780 (27.99 percent). This will allow the utility the opportunity to recover its expenses and earn an 8.19 percent return on its water system. The calculation is shown on Table 7-1.

**Table 7-1  
Water Revenue Requirement**

Adjusted Rate Base	\$81,694
Rate of Return	<u>x 8.19%</u>
Return on Rate Base	\$6,691
Adjusted O&M Expense	144,569
Depreciation Expense	4,862
Amortization Expense	(295)
Taxes Other Than Income	<u>7,801</u>
Revenue Requirement	\$163,627
Less Adjusted Test Year Revenues	<u>127,847</u>
Annual Increase	<u>\$35,780</u>
Percent Increase	<u>27.99%</u>

**Issue 8:** What is the appropriate rate structure and rates for Brevard Waterworks' water system?

**Recommendation:** The recommended rate structure and monthly water rates are shown on Schedule Nos. 4-A and 4B. 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 systems are 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. The average residential water demand excluding zero gallon bills is 3,457 gallons per month. The utility's current water system rate structure for residential customers consists of a base facility charge (BFC) and three-tier inclining block rate structure. The rate blocks are: 1) 0-6,000 gallons; 2) 6,001-12,000 gallons; and 3) all usage in excess of 12,000 gallons per month. General service customers are billed based on a BFC and uniform gallonage charge. This rate structure was approved in the utility's last rate case prior to the transfer from Aqua to Brevard Waterworks.

Staff performed an analysis of the utility's billing data in order to evaluate 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 two and a half, which indicates the non-discretionary usage threshold should be set at 4,000 gallons per month. A review of the customer billing data indicates that approximately 78 percent of customer bills during the test year included 4,000 gallons per month or less. 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 separate gallonage charges for discretionary and non-discretionary usage for residential water rates. Although the utility does not have customers for residential irrigation and private fire protection, the utility would like to maintain a rate structure for these customer classes in the event they are needed in the future. Staff recommends that the residential irrigation rate structure and rates be the same as the

residential water customers. The private fire protection rate should be one-twelfth of the approved BFC for the residential water customers pursuant to Rule 25-30.465, F.A.C.

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 29.9 percent, after the removal of miscellaneous service revenues, the residential discretionary consumption can be expected to decline by 354,000 gallons resulting in anticipated average residential demand of 2,765 gallons per month. Staff recommends a 4.4 percent reduction in total residential consumption and corresponding reductions of \$3,681 for purchased water and \$173 for RAFs to reflect the anticipated repression, which results in a post repression revenue requirement of \$151,546.

Based on the foregoing, staff recommends 40 percent of the water revenues be generated from the BFC. A 4.4 percent reduction in total residential consumption and corresponding reductions of \$3,681 for purchased water and \$173 for RAFs should be made to reflect the anticipated repression. Staff recommends a traditional BFC and gallonage charge rate structure with separate gallonage charges for discretionary and non-discretionary usage for residential water customers. Staff recommends that the residential irrigation rate structure and rates be the same as the residential water customers. The private fire protection rate should be one-twelfth of the approved BFC, pursuant to Rule 25-30.465, F.A.C. General Service customers should be billed a BFC and uniform gallonage charge.

Staff's recommended rate structure and rates are shown on Schedule Nos. 4-A and 4-B. 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:** In determining whether any portion of the interim increase granted should be refunded, how should the refund be calculated, and what is the amount of the refund, if any?

**Recommendation:** The proper refund amount should be calculated by using the same data used to establish final rates, excluding pro forma and other items not in effect during the interim period. This revised revenue requirement for the interim collection period should be compared to the amount of interim revenue requirement granted. Based on this calculation, no refunds are required. Further, upon issuance of the Consummating Order in this docket, the escrow account should be released with all funds including interest returned to the utility. (Frank)

**Staff Analysis:** By Order No. PSC-14-0683-PCO-WU, the Commission authorized the collection of interim water rates, subject to refund, pursuant to Section 367.082, F.S.<sup>9</sup> The approved interim revenue requirement was \$150,411 which represented an increase of \$13,623 or 9.96 percent.

According to Section 367.082, F.S., any refund should be calculated to reduce the rate of return of the utility during the pendency of the proceeding to the same level within the range of the newly authorized rate of return. Adjustments made in the rate case test period that do not relate to the period interim rates are in effect should be removed.

In this proceeding, the test period for establishment of interim and final rates is the 12-month period ended August 31, 2014. Brevard Waterworks' approved interim rates did not include any provisions for pro forma plant or projected operating expenses. The interim increase was designed to allow recovery of total operating expenses.

To establish the proper refund amount, staff calculated a revised interim revenue requirement utilizing the same data used to establish final rates. Using the principles discussed above, the revenue requirement of \$150,411 granted in Order No. PSC-14-0683-PCO-WU is less than the revised revenue requirement for the interim collection period of \$163,627. As such, staff recommends that no refund is required for revenues collected under interim rates. Further, upon issuance of the Consummating Order in this docket, the escrow account should be released with all funds including interest returned to the utility.

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<sup>9</sup>Id.

**Issue 10:** 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.?

**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. (Thompson, Monroe)

**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 \$554 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 11:** What is the appropriate customer deposit for Brevard Waterworks' water system?

**Recommendation:** The appropriate initial customer deposit should be \$105 for the residential 5/8 inch x 3/4 inch meter size for water. The initial customer deposits for all other residential meter sizes and all general service meter sizes should be two times the average estimated bill for water. The approved initial customer deposits should be effective for connections made on or after the stamped approval date on the tariff sheets, pursuant to Rule 25-30.475, F.A.C. The utility should be required to collect the approved deposits until authorized to change them by the Commission in a subsequent proceeding. (Thompson)

**Staff Analysis:** Rule 25-30.311, F.A.C., provides the criteria for collecting, administering, and refunding customer deposits. Customer deposits are designed to minimize the exposure of bad debt expense for the utility and, ultimately, the general body of ratepayers. An initial customer deposit ensures that the cost of providing service is recovered from the cost causer. Historically, the Commission has set initial customer deposits equal to two times the average estimated bill.<sup>10</sup> Currently, the utility's initial customer deposit is \$89.06 for water. Based on the staff recommended rates, the appropriate initial customer deposit should be \$105 for water to reflect an average residential customer bill for two months.

Staff recommends the appropriate initial customer deposit should be \$105 for the residential 5/8 inch x 3/4 inch meter size for water and wastewater, respectively. The initial customer deposits for all other residential meter sizes and all general service meter sizes should be two times the average estimated bill for water and wastewater. The approved initial customer deposits should be effective for services rendered or connections made on or after the stamped approval date on the tariff sheets, pursuant to Rule 25-30.475, F.A.C. The utility should be required to collect the approved deposits until authorized to change them by the Commission in a subsequent proceeding.

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<sup>10</sup>Order No. PSC-15-0142-PAA-SU, issued March 26, 2015, in Docket No. 130178-SU, *In re: Application for staff-assisted rate case in Polk County by Crooked Lake Park Sewerage Company.*

**Issue 12:** 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?

**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. (Monroe)

**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.

The utility 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 \$23,867. Alternatively, the utility could establish an escrow agreement with an independent financial institution.

If the utility 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 the utility 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 the utility;
- 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 the utility, 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.

The utility 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 13:** 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?

**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 to all the applicable NARUC USOA accounts have been made to the utility's books and records. The utility's support documentation should include a list, by issue, of all Commission ordered adjustments and a reference to where the corresponding bookkeeping entries can be found in the general ledger that is provided. (Monroe)

**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 to all the applicable NARUC USOA accounts have been made to the utility's books and records.

The utility's support documentation should include a list, by issue, of all Commission ordered adjustments and a reference to where the corresponding bookkeeping entries can be found in the general ledger that is provided. All support documentation should follow the guidelines set forth in Rule 25-30.450, F.A.C., which states:

In each instance, the utility must be able to support any schedule submitted, as well as any adjustments or allocations relied on by the utility. The work sheets, etc., supporting the schedules and data submitted must be organized in a systematic and rational manner so as to enable Commission personnel to verify the schedules in an expedient manner and minimum amount of time. The supporting work sheets, etc., shall list all reference sources necessary to enable Commission personnel to trace to original source of entry into the financial and accounting system and, in addition, verify amounts to the appropriate schedules.

**Issue 14:** Should this docket be closed?

**Recommendation:** No. If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, a consummating order should be issued. The docket should remain open for staff's verification that the revised tariff sheets and customer notice have been filed by the utility and approved by staff. Once these actions are complete, this docket should be closed administratively. (Murphy)

**Staff Analysis:** If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, a consummating order should be issued. The docket should remain open for staff's verification that the revised tariff sheets and customer notice have been filed by the utility and approved by staff. Once these actions are complete, this docket should be closed administratively.

BREVARD WATERWORKS, INC. TEST YEAR ENDED 08/31/14 SCHEDULE OF WATER RATE BASE			SCHEDULE NO. 1-A DOCKET NO. 140186-WU
DESCRIPTION	BALANCE PER UTILITY	STAFF ADJUSTMENTS TO UTIL. BAL.	BALANCE PER STAFF
UTILITY PLANT IN SERVICE	\$98,963	\$3,791	\$102,754
LAND & LAND RIGHTS	2,766	0	2,766
ACCUMULATED DEPRECIATION	(38,099)	2,227	(35,872)
CIAC	(7,803)	0	(7,803)
ACCUMULATED AMORTIZATION OF CIAC	1,967	(190)	1,777
WORKING CAPITAL ALLOWANCE	<u>18,834</u>	<u>(763)</u>	<u>18,071</u>
WATER RATE BASE	<u>\$76,628</u>	<u>\$5,066</u>	<u>\$81,694</u>

<b>BREVARD WATERWORKS, INC.</b>		<b>SCHEDULE NO. 1-B</b>
<b>TEST YEAR ENDED 08/31/14</b>		<b>DOCKET NO. 140186-WU</b>
<b>ADJUSTMENTS TO RATE BASE</b>		
		<b><u>WATER</u></b>
<b><u>UTILITY PLANT IN SERVICE</u></b>		
1.	To reclassify filing fee for transfer proceedings.	(\$750)
2.	To reflect an averaging adjustment.	(593)
3.	To include pro forma pipe replacement.	5,134
	Total	<u>\$3,791</u>
<b><u>ACCUMULATED DEPRECIATION</u></b>		
1.	To reflect reclassification of plant.	\$23
2.	To reflect an averaging adjustment.	2,360
3.	To reflect pro forma pipe replacement.	(156)
	Total	<u>\$2,227</u>
<b><u>ACCUM AMORTIZATION OF CIAC</u></b>		
1.	To reflect the appropriate accumulated amortization.	(\$21)
2.	To reflect an averaging adjustment.	(169)
	Total	<u>(\$190)</u>
<b><u>WORKING CAPITAL ALLOWANCE</u></b>		
	To reflect the appropriate amount of working capital.	<u>(\$763)</u>

BREVARD WATERWORKS, INC. TEST YEAR ENDED 08/31/14 SCHEDULE OF CAPITAL STRUCTURE							SCHEDULE NO. 2 DOCKET NO. 140186-WU		
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	(\$18,182)	\$76,296	92.18%	8.74%	8.06%	
2. LONG TERM DEBT	0	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>(1,286)</u>	<u>5,398</u>	<u>6.61%</u>	2.00%	<u>0.13%</u>	
4. TOTAL	<u>\$34,792</u>	<u>\$66,370</u>	<u>\$101,162</u>	<u>(\$19,468)</u>	<u>\$81,694</u>	<u>98.79%</u>		<u>8.19%</u>	
<b>RANGE OF REASONABLENESS</b>						<b><u>LOW</u></b>	<b><u>HIGH</u></b>		
RETURN ON EQUITY						<u>7.74%</u>	<u>9.74%</u>		
OVERALL RATE OF RETURN						<u>7.27%</u>	<u>9.11%</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>\$35,780</u> 27.99%	<u>\$163,627</u>
<b>OPERATING EXPENSES:</b>					
2. OPERATION & MAINTENANCE	\$150,671	(\$6,101)	\$144,569	\$0	\$144,569
3. DEPRECIATION (NET)	4,725	137	4,862	0	4,862
4. CIAC AMORTIZATION EXPENSE	(221)	(74)	(295)	0	(295)
5. TAXES OTHER THAN INCOME	5,659	532	6,191	1,610	7,801
6. INCOME TAXES	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
7. TOTAL OPERATING EXPENSES	<u>\$160,834</u>	<u>(\$5,508)</u>	<u>\$155,326</u>	<u>\$1,610</u>	<u>\$156,936</u>
8. OPERATING INCOME/(LOSS)	<u>(\$45,233)</u>		<u>(\$27,479)</u>		<u>\$6,691</u>
9. WATER RATE BASE	<u>\$76,628</u>		<u>\$81,694</u>		<u>\$81,694</u>
10. RATE OF RETURN	<u>(59.03%)</u>		<u>(33.64%)</u>		<u>8.19%</u>

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

**SCHEDULE NO. 3-B**  
**DOCKET NO. 140186-WU**  
**PAGE 1 OF 2**

	<u>WATER</u>
<b>OPERATING REVENUES</b>	
1. a. To reflect the appropriate test year services revenues.	<u>\$12,246</u>
<b>OPERATION AND MAINTENANCE EXPENSES</b>	
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>(591)</u>
Total	<u>\$3,965</u>
2. Contractual Services – Other (636)	
a. To reflect the appropriate test year expense.	\$358
b. To reflect the appropriate fuel, vehicle maintenance, and salary costs.	<u>(976)</u>
Total	<u>(\$618)</u>
3. Insurance Expense (655)	
a. To reflect the appropriate balance per supporting documentation.	<u>(\$811)</u>
4. Rate Case Expense (665)	
a. To reflect appropriate rate case expense.	<u>\$264</u>
5. Regulatory Commission Expense-Other (667)	
a. To reflect appropriate reclassification and amortization of transfer costs.	<u>\$150</u>
6. Bad Debt Expense (670)	
a. To reflect appropriate bad debt expense.	<u>(\$8,704)</u>
7. Miscellaneous Expense (675)	
a. To properly reclassify property taxes and remove out-of-period expenses.	<u>(\$347)</u>
<b>TOTAL OPERATION &amp; MAINTENANCE ADJUSTMENTS</b>	<u>(\$6,101)</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.	(\$19)
2. To reflect pro forma pipe replacement.	<u>156</u>
Total	<u>\$137</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>87</u>
Total	<u>\$532</u>

<b>BREVARD WATERWORKS, INC.</b>		<b>SCHEDULE NO. 3-C</b>	
<b>TEST YEAR ENDED 08/31/14</b>		<b>DOCKET NO. 140186-WU</b>	
<b>ANALYSIS OF WATER OPERATION AND MAINTENANCE EXPENSE</b>			
	<b>TOTAL PER UTILITY</b>	<b>STAFF PER ADJUST.</b>	<b>TOTAL PER PER STAFF</b>
(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	3,965	84,626
(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
(632) CONTRACTUAL SERVICES - ACCOUNTING	2,500	0	2,500
(633) CONTRACTUAL SERVICES - LEGAL	195	0	195
(636) CONTRACTUAL SERVICES - OTHER	41,188	(618)	40,570
(640) RENTS	0	0	0
(650) TRANSPORTATION EXPENSE	0	0	0
(655) INSURANCE EXPENSE - GEN LIABILITY	2,125	(811)	1,314
(666) REGULATORY COMMISSION EXPENSE	260	264	524
(667) REGULATORY COMMISSION EXPENSE-OTHER	100	150	250
(670) BAD DEBT EXPENSE	18,161	(8,704)	9,457
(675) MISCELLANEOUS EXPENSES	<u>480</u>	<u>(347)</u>	<u>133</u>
Total	<u>\$150,670</u>	<u>(\$6,101)</u>	<u>\$144,569</u>

BREVARD WATERWORKS, INC. DOCKET NO. 140186-WU STAFF'S RECOMMENDED AND ALTERNATIVE WATER RATE STRUCTURES AND RATES			
Test Year Rate Structure and Rates		Recommended Rate Structure and Rates	
Monthly BFC/3-Tier Inclining Block Rate Structure		Monthly BFC/2-Tier Rate Structure BFC = 40%	
BFC	\$20.69	BFC	\$21.38
0-6 kgals	\$7.07	0-4 kgals	\$10.73
>6-12 kgals	\$10.62	>4 kgals	\$16.10
> 12 kgals	\$14.14		
Typical Monthly Bills		Typical Monthly Bills	
Consumption (kgals)		Consumption (kgals)	
0	\$20.69	0	\$21.38
4	\$48.97	4	\$64.30
6	\$62.69	6	\$96.50
10	\$105.17	10	\$160.90
Alternative 1 Rate Structure and Rates		Alternative 2 Rate Structure and Rates	
Monthly BFC/2-Tier Rate Structure BFC = 35%		Monthly BFC/2-Tier Rate Structure BFC =45%	
BFC	\$18.65	BFC	\$24.13
0-4 kgals	\$11.68	0-4 kgals	\$9.79
>4 kgals	\$17.52	>4 kgals	\$14.69
Typical Monthly Bills		Typical Monthly Bills	
Consumption (kgals)		Consumption (kgals)	
0	\$18.65	0	\$24.13
4	\$65.37	4	\$63.29
6	\$100.41	6	\$92.67
10	\$170.49	10	\$151.43

**BREVARD WATERWORKS, INC.**  
**TEST YEAR ENDED AUGUST 31, 2014**  
**MONTHLY WATER RATES**

**SCHEDULE NO. 4-B**  
**DOCKET NO. 140186-WU**

	<b>RATES AT TIME OF FILING</b>	<b>COMMISSION APPROVED INTERIM RATES</b>	<b>STAFF PRELIMINARY RECOMMENDED RATES</b>	<b>4 YEAR RATE REDUCTION</b>
<b><u>Residential, Irrigation and General Service</u></b>				
Base Facility Charge by Meter Size				
5/8" x 3/4"	\$20.69	\$22.86	\$21.38	\$0.08
3/4"	\$31.04	\$34.30	\$32.07	\$0.12
1"	\$51.74	\$57.18	\$53.45	\$0.20
1-1/2"	\$103.47	\$114.34	\$106.90	\$0.39
2"	\$165.56	\$182.96	\$171.04	\$0.63
3"	\$331.14	\$365.94	\$342.08	\$1.25
4"	\$517.40	\$571.78	\$534.50	\$1.96
6"	\$1,034.80	\$1,143.56	\$1,069.00	\$3.91
8"	\$1,655.68	\$1,829.69	\$1,710.40	\$6.26
10"	\$2,380.03	\$2,630.17	\$2,458.70	\$8.99
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	\$10.73	\$0.04
Over 4,000 gallons	N/A	N/A	\$16.10	\$0.06
Charge per 1,000 gallons - General Service	\$7.93	\$8.76	\$11.69	\$0.04
<b><u>Private Fire Protection</u></b>				
Base Facility Charge by Meter Size				
2"	\$13.80	\$15.25	\$14.25	\$0.05
3"	\$27.60	\$30.50	\$28.51	\$0.10
4"	\$43.12	\$47.65	\$44.54	\$0.16
6"	\$86.23	\$95.30	\$89.08	\$0.33
8"	\$137.97	\$152.47	\$142.53	\$0.52
10"	\$198.33	\$219.18	\$204.89	\$0.75
<b><u>Typical Residential 5/8" x 3/4" Meter Bill Comparison</u></b>				
4,000 Gallons	\$48.97	\$54.10	\$64.30	
6,000 Gallons	\$63.11	\$69.72	\$96.50	
10,000 Gallons	\$105.59	\$116.68	\$160.90	