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FPSC - Records/Reporting

FLORIDA PUBLIC SERVICE COMMISSION
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M E M O R A N D U M

July 24, 1997

TO: DIRECTOR, DIVISION OF RECORDS AND REPORTING (HAYO)

FROM: DIVISION OF WATER & WASTEWATER (JOHNSON, EDWARDS) *JSB*
DIVISION OF LEGAL SERVICES (BRUBAKER) *JSB*

RE: DOCKET NO. 970397-WU - W.B.B. UTILITIES, INC. -
APPLICATION FOR ALLOWANCE FOR FUNDS PRUDENTLY INVESTED
COUNTY: LAKE

AGENDA: AUGUST 5, 1997 - REGULAR AGENDA - PROPOSED AGENCY ACTION
- INTERESTED PERSONS MAY PARTICIPATE

CRITICAL DATES: NONE

SPECIAL INSTRUCTIONS: I:\PSC\WAW\WP\970397WU.RCM

CASE BACKGROUND

W.B.B. Utilities, Inc. (W.B.B. or utility) is a Class C utility providing water service in Lake County. According to its December 31, 1996 annual report, the utility was serving 31 residential customers. The utility reported in its December 31, 1996, annual report operating revenues of \$11,291 and a net operating loss of \$4,554.

On December 18, 1996, in Docket No. 961498-WU, the utility filed proposed tariffs along with an application for authority to increase its service availability charges and initiate allowance for funds prudently invested (AFPI) charges pursuant to Section 367.091, Florida Statutes, and Rules 25-30.565 and 25-30.434, Florida Administrative Code, respectively. The test year was the twelve month period ending December 31, 1995. The utility requested approval of a revised main extension charge and plant capacity charge. The utility also, requested AFPI charges to cover non-used and useful plant. By letter dated March 24, 1997, the utility withdrew its request for AFPI charges, after determining that the newly constructed plant was 100% used and useful. By Order No. PSC-97-0598-POF-WU, issued May 23, 1997, the utility was granted a revised service availability charge for the main extension and the plant capacity charge. Order No. PSC-97-0598-

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FOF-WU also acknowledged the utility's notice of voluntary withdrawal of its AFPI application.

On March 31, 1997, W.B.B. Utilities filed a limited proceeding pursuant to Section 367.0822, Florida Statutes, to increase its rate base to include the cost of the newly constructed plant. Test year was the twelve month period ended December 31, 1996. The utility paid the appropriate filing fee for a limited proceeding pursuant to Section 25-30.030 (2)G, Florida Administrative Code. However, it was determined that the new plant is fire flow for future customers. The utility constructed this plant to satisfy the county's requirements for fire flow. Therefore, it was determined that it is appropriate for the utility to apply for AFPI charges to seek recovery of it's costs incurred. An application fee is not required for an AFPI proceeding. Therefore, by memo to the Division of Administration, staff will request the refund of the utility's filing fee. In its petition, the utility is requesting AFPI charges for recovery of the carrying cost on the non-used and useful plant amount of \$93,689. In preparation for this recommendation, staff has reviewed the utility's records for compliance with Commission rules and orders and determined components for rate setting.

The utility's service area is designated as a critical use area. The utility is under the jurisdiction of the St. Johns River Water Management District. This recommendation addresses the utility's request for AFPI charges.

DISCUSSION OF ISSUES

ISSUE 1: What percentage of the utility's water treatment plant and distribution system is used and useful?

RECOMMENDATION: The water treatment plant should be considered 72% used and useful and the water distribution system should be considered 42% used and useful. (EDWARDS)

STAFF ANALYSIS: The mechanics of this system is primarily pump, chlorinate, and distribute. The utility's monthly operation reports (MORs) for the test year were utilized to calculate the used and useful percentages. These calculations appeared to be high (709 gpd per equivalent residential connection (ERC)) in comparison to using the standard 350 gpd per ERC factor. However, staff concluded that the high flow readings were reasonable. Therefore, the MOR's high flow readings were utilized to calculate the used and useful percentages. The service area is not built out. However, all of the service lines have been installed (this includes all of the remaining available lots). It is recommended that the water treatment plant be considered 72% used and useful, and the water distribution system be considered 42% used and useful (Attachment "2A & 2B").

Water Treatment Plant: The utility's water treatment facility has a designed flow capacity of 540,000 gallons per day (gpd). The design components consist of two wells, hypomechanical chlorine injection system, and a 7,500-hydropneumatic tank. The housekeeping at the plant is satisfactory. At the time of the engineering field investigation, this facility appeared to be operating properly.

Water Distribution System: The water distribution system consists of the following components: 6 inch PVC pipe, 4-inch PVC pipe, 2 inch mains, and 6 fire hydrants (in Phase II of the development only). At the time of the engineering investigation, the distribution system appeared to be operating properly.

In conclusion, staff recommends that the water treatment plant be considered 72% used and useful and the water distribution system be considered 42% used and useful (Attachment 2A & 2B).

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ISSUE 2: What are the appropriate adjustments to reflect non-used and useful plant in service?

RECOMMENDATION: The Utility's plant-in-service should be reduced by \$93,689 with a corresponding adjustment to accumulated depreciation and depreciation expense of \$3,255. (JOHNSON)

STAFF ANALYSIS: As discussed within Issue 1 of this recommendation, staff recommends that the utility's water treatment plant is 72% used and useful and the distribution mains are 42% used and useful. As previously stated the utility is requesting AFPI charges for recovery of the carrying cost on the non-used and useful plant amount of \$93,689. The utility constructed the plant to satisfy the county's requirements for fire flow.

It was determined that the new plant is fire flow for future customers and is, therefore, non-used and useful. The county required the utility to upgrade it's fire flow system to accommodate the 48 additional ERCs in phase II of the development. The existing customers presently reside in phase I of the development. Because it is the future customers that will benefit from the system's fire flow upgrades, they are the appropriate customers to seek recovery from. Therefore, it is appropriate for the Utility to apply for AFPI charges to seek recovery of it's costs incurred.

Accordingly, staff decreased utility plant-in-service by \$93,689 with a corresponding reduction to accumulated depreciation and depreciation expense of \$3,255. Staff recommends that these adjustments are reasonable and should be approved.

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ISSUE 3: What are the appropriate AFPI charges for W.B.B. Utilities, Inc.?

RECOMMENDATION: The appropriate AFPI charges are shown in Schedule No. 1-D. The charge shall be \$179.36 effective August, 1997 and shall accumulate to \$1,547.32 over a five year period. After the utility collects these charges from the 48 water ERCs, the charge should be discontinued. (JOHNSON)

STAFF ANALYSIS: An allowance for funds prudently invested (AFPI) charge is designed to allow the utility to recover a fair rate of return on a portion of the plant facilities which were prudently constructed, but exceed the amount necessary to serve current customers. This charge allows the recovery of carrying cost on the non-used and useful plant. This one-time charge is based on the number of ERCs and is generally applicable to all future customers who have not already prepaid connection fees, CIAC or customer advances. W.B.B. requested an AFPI charge for the non-used and useful portion of its water transmission and distribution lines.

The test year used in this case for establishing the amount of non-used and useful plant is the year ended December 1996. Pursuant to Rule 25-30.434 (4) Florida Administrative Code, the beginning date for accruing the AFPI charge shall agree with the month following the end of the test year that was used to establish the amount of non-used and useful plant. Therefore, the beginning date for accruing the AFPI charge in this case was January 1997. However, the effective date of the charge is in August 1997. Pursuant to the rule, if any connections have been made between the beginning date and the effective date of the charge, no AFPI will be collected from those connections.

The cost of the qualifying asset is the net plant cost removed from the rate base. The capacity of the qualifying asset is that portion left over after considering test year consumption, fire flow, and margin reserve, if appropriate. The number of future customers is calculated based on the remaining capacity and the average usage of the current customers.

Staff recommends that the AFPI charges on the attached schedule 1-D be approved. Staff has calculated AFPI charges allowing carrying costs relative to the non-used and useful plant for the 48 ERCs. The amount of the AFPI charges are based on the date future customers connect. Staff recommends that the utility collect AFPI charges as shown on Schedule 1-D, for the five year period ended December, 2001. The charge should be \$179.36 effective August, 1997, and accumulate to \$1,547.32 over a five year period. Carrying costs incurred beyond five years should be

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considered excessive, unless the utility demonstrates extraordinary or unusual circumstances. After the utility collects these charges for the 48 water ERCs, the charge should be discontinued.

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ISSUE 4: Should the docket be closed?

RECOMMENDATION: Yes, upon the expiration of the protest period, if no timely protest is received from a substantially affected person within 21 days from the issuance of the Order, this docket should be closed administratively. (BRUBAKER)

STAFF ANALYSIS: Upon expiration of the protest period, if no timely protest is received from a substantially affected person within 21 days from the issuance of the Order, this docket should be closed administratively.

W.B.B. UTILITIES, INC.
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Schedule 1-A

Allowance for Funds Prudently Invested
Calculation of Carrying Costs for Each ERC

Information Needed

1. Cost of Qualifying Assets	\$	93,689
2. Capacity of Qualifying Assets		48 GPD
3. Number of Future Customers		48 ERC
4. Annual Depreciation Expense	\$	3,255
5. Rate of Return		9.30%
6. Weighted Cost of Equity		1.10%
7. Federal Income Tax Rate		0.00%
8. State Income Tax Rate		5.50%
9. Annual Property Tax	\$	0
10. Other Costs	\$	0
11. Depreciation Rate of Assets		3.47%
12. Test Year		1996

Allowance for Funds Prudently Invested
Calculation of Carrying Costs for Each ERC:

Cost of Qualifying Assets:	93,889	Annual Depreciation Expense:	3,255
Divided By Future ERC:	48	Future ERC's:	48
	-----		-----
Cost/ERC:	1,951.85	Annual Depr. Cost per ERC:	67.81
Multiply By Rate of Return:	9.30%		-----
	-----		-----
Annual Return Per ERC:	181.52	Annual Property Tax Expense:	0
	-----	Future ERC's:	48
Annual Reduction in Return:	6.31		-----
(Annual Depreciation Expense	-----	Annual Prop. Tax per ERC:	0.00
per ERC Times Rate of Return)	-----		-----
	-----		-----
Federal Tax Rate:	0.00%	Weighted Cost of Equity:	1.10%
Effective State Tax Rate:	5.50%	Divided by Rate of Return:	9.30%
	-----		-----
Total Tax Rate:	5.50%	% of Equity in Return:	11.83%
	-----		-----
	-----		-----
Effective Tax on Return:	0.65%	Other Costs:	0
(Equity % Times Tax Rate)	-----	Future ERC's:	48
	-----		-----
Provision For Tax:	0.69%	Cost per ERC:	0.00
(Tax on Return/(1-Total Tax Rate))	-----		-----
	-----		-----

Allowance for Funds Prudently Invested
Calculation of Carrying Cost Per ERC Per Year:

	1997	1998	1999	2000	2001
Unfunded Other Costs:	0.00	0.00	0.00	0.00	0.00
Unfunded Annual Depreciation:	67.81	67.81	67.81	67.81	67.81
Unfunded Property Tax:	0.00	0.00	0.00	0.00	0.00
Subtotal Unfunded Annual Expense:	67.81	67.81	67.81	67.81	67.81
Unfunded Expenses Prior Year:	0.00	67.81	135.63	203.44	271.25
Total Unfunded Expenses:	67.81	135.63	203.44	271.25	339.06
Return on Expenses Current Year:	6.31	6.31	6.31	6.31	6.31
Return on Expenses Prior Year:	0.00	6.31	12.61	18.92	25.23
Return on Plant Current Year:	181.52	175.22	168.91	162.60	156.30
Earnings Prior Year:	0.00	187.83	393.13	617.52	862.77
Compound Earnings from Prior Year:	0.00	17.47	36.56	57.43	80.24
Total Compounded Earnings:	187.83	393.13	617.52	862.77	1,130.84
Earnings Expansion Factor for Tax:	1.01	1.01	1.01	1.01	1.01
Revenue Required to Fund Earnings:	189.12	395.83	621.77	868.71	1,138.63
Revenue Required to Fund Expenses:	67.81	135.63	203.44	271.25	339.06
Subtotal:	256.93	531.46	825.20	1,139.96	1,477.69
Divided by Factor for Gross Receipts Tax:	0.955	0.955	0.955	0.955	0.955
ERC Carrying Cost for 1 Year:	269.04	556.50	864.09	1,193.68	1,547.32

Allowance for Funds Prudently Invested
Schedule of Charges:

	1997	1998	1999	2000	2001
January	22.42	293.00	582.13	891.55	1,223.15
February	44.84	316.95	607.76	919.02	1,252.62
March	67.26	340.91	633.40	946.49	1,282.09
April	89.68	364.86	659.03	973.95	1,311.56
May	112.10	388.82	684.66	1,001.42	1,341.03
June	134.52	412.77	710.29	1,028.88	1,370.50
July	156.94	436.73	735.93	1,056.35	1,399.97
August	179.36	460.68	761.56	1,083.82	1,429.44
September	201.78	484.64	787.19	1,111.28	1,458.91
October	224.20	508.59	812.82	1,138.75	1,488.38
November	246.62	532.54	838.46	1,166.21	1,517.85
December	269.04	556.50	864.09	1,193.68	1,547.32

(Attachment 2A)

WATER TREATMENT PLANT

USED AND USEFUL DATA

Docket No. 961498-WU Utility W.B.B. UTILITIES, INC. Date MAY 97

- 1) Capacity of Plant 540,000 gallons per day
- 2) Maximum Daily Flow 26,660 gallons per day
- 3) Average Daily Flow 20,571 gallons per day
- 4) Fire Flow Capacity 360,000 gallons per day
 - a) Needed Fire Flow 360,000 gallons per day
- 5) Margin Reserve 1,793 gallons per day
*Not to exceed 20% of present customers
 - a) Test Year Customers in ERC's - Begin 27 End 31 Av. 29
 - b) Customer Growth Using Regression Analysis in ERC's for Most Recent 5 Years Including Test Year 1.3 ERC's
 - c) Construction Time for Additional Capacity 1.5 Years

(b) x (c) x $\left[\frac{2}{(a)} \right] = \underline{1,793}$ gallons per day Margin Reserve
- 6) Excessive Unaccounted for Water none gallons per day
 - a) Total Amount gallons per day % of Av. Daily Flow
 - b) Reasonable Amount gallons per day % of Av. Daily Flow
 - c) Excessive Amount gallons per day % of Av. Daily Flow

PERCENT USED AND USEFUL FORMULA

$$\left[\frac{(2 + 5) + 4a - 6}{1} \right] = \underline{72} \% \text{ Used and Useful}$$


Engineer

WATER DISTRIBUTION SYSTEM

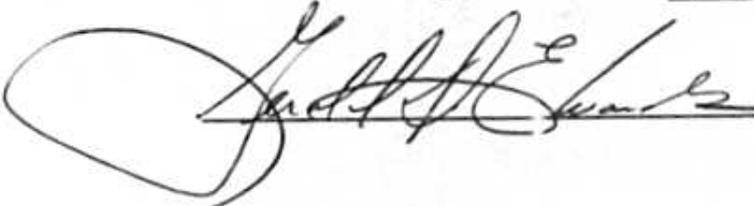
(Attachment 2B)
USED AND USEFUL DATA

Docket No. 961498-WU Utility W.B.B. UTILITIES, INC. Date MAY 97

- 1) Capacity 79 ERC's (Number of potential customers without expansion)
- 2) Number of TEST YEAR Connections 31 ERC's
- a) Begin Test Year 27 ERC's
- b) End Test Year 31 ERC's
- c) Average Test Year 29 ERC's
- 3) Margin Reserve 1.95 ERC's
- *Not to exceed 20% of present customers
- a) Customer Growth Using Regression Analysis in ERC's for Most Recent 5 Years Including Test Year 1.3 ERC's
- b) Construction Time for Additional Capacity 1.5 Years
- (a) x (b) = 1.95 ERC's Margin Reserve

PERCENT USED AND USEFUL FORMULA

$$\frac{(2 + 3)}{1} = \underline{42} \% \text{ Used and Useful}$$

 Engineer