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BEFORE THE ARIZONA CORPORATION CC

COMMISSIONERS

Arizona Corporation Commission

DOCKETED

JAN - 6 2012

GARY PIERCE - Chairman  
BOB STUMP  
SANDRA D. KENNEDY  
PAUL NEWMAN  
BRENDA BURNS

DOCKETED BY [Signature]

IN THE MATTER OF THE APPLICATION OF  
ORANGE GROVE WATER COMPANY, INC.  
FOR APPROVAL OF FINANCING.

DOCKET NO. W-02237A-11-0084

IN THE MATTER OF THE APPLICATION OF  
ORANGE GROVE WATER COMPANY, INC.  
FOR A RATE INCREASE.

DOCKET NO. W-02237A-11-0180

DECISION NO. 72734

ORDER

Open Meeting  
December 13 and 14, 2011  
Phoenix, Arizona

BY THE COMMISSION:

\* \* \* \* \*

Having considered the entire record herein and being fully advised in the premises, the Arizona Corporation Commission ("Commission") finds, concludes, and orders that:

FINDINGS OF FACT

Procedural History

1. On February 22, 2011, Orange Grove Water Company, Inc. ("Orange Grove" or "Company") filed with the Commission an application requesting approval of a loan from the Water Infrastructure Financing Authority ("WIFA") in the approximate face amount of \$200,000 with a 20 year term, secured by the Company's assets, for the purpose of funding construction of a new 100,000 gallon storage tank, chlorine disinfection system, booster pump station, and electrical upgrades to support the new booster pumps.

2. On April 27, 2011, Orange Grove filed an application for an increase in its permanent rates and charges.

1           3.     On May 4, 2011, the Company filed proof of mailing that it had mailed notice to its  
2 customers of its application for a permanent rate increase on May 2, 2011.

3           4.     On May 20, 2011, the Commission's Utilities Division ("Staff") issued a Notice of  
4 Sufficiency indicating that the Company's rate application was sufficient, and classifying the  
5 Company as a Class D utility.

6           5.     On June 10, 2011, Staff filed a Motion to Consolidate the rate application and the  
7 financing application.

8           6.     On June 15, 2011, a Procedural Order was issued consolidating the rate application  
9 and financing application dockets.

10          7.     On July 25, 2011, the Company filed an Affidavit indicating the provision of public  
11 notice of the financing application.

12          8.     On August 9, 2011, after conducting an investigation of the Company's proposed rates  
13 and charges for water service and the financing request, Staff filed its Staff Report on the Company's  
14 rate application and financing application. The Staff Report indicated that any party wishing to file  
15 comments to the Staff Report should file them with the Commission's Docket Control by 4:00 p.m.  
16 on or before August 19, 2011.

17          9.     On August 19, 2011, Orange Grove filed its Comments to the Staff Report.

18          10.    On August 24, 2011, a Procedural Order was issued directing Staff to file a Response  
19 to the Comments, and directing that the Response include any updated schedules, if applicable.

20          11.    On September 16, 2011, Staff filed a Response to Orange Grove's Comments  
21 ("Response"), and a Revised Staff Report.

22          12.    On September 27, 2011, Orange Grove filed a Reply to Staff's Response ("Reply").

23          13.    On November 4, 2011, a Procedural Order was issued extending the time period  
24 prescribed by Arizona Administrative Code R14-2-103(B)(11)(d) for 30 days in order to allow  
25 sufficient time for the review of Orange Grove Water Company, Inc.'s Reply.

26 **Background**

27          14.    Pursuant to authority granted by the Commission in Decision No. 39886 (January 29,  
28 1969), Orange Grove provides water utility service to the public in a territory located seven miles

1 south of Yuma in Yuma County, Arizona. Orange Grove is organized as a C Corporation.

2 15. Orange Grove's present rates and charges for water service were approved in Decision  
3 No. 71110 (June 5, 2009), based on a test year ended December 31, 2007.

4 16. Staff conducted a field inspection of the Company's plant facilities on July 22, 2011,  
5 and reports that the Company's water system consists of two wells, one with a yield of 55 gallons per  
6 minute ("GPM") and one backup well with a yield of 300 GPM; one 5,000 gallon pressure tank; a  
7 distribution system serving 301 metered connections as of year end 2010, and 306 connections during  
8 the peak month of use in June 2010. There are 10 fire hydrants in the Company's system.

9 **Rate Application**

10 17. The rate application is based on a test year ended December 31, 2010.

11 18. During the test year, the Company provided service to an average of 303 metered  
12 customers, all of whom are served by 5/8 x 3/4 - inch meters.

13 19. The water rates and charges for the Company at present, as proposed by the Company  
14 and as recommended by Staff are as follows:

		<b><u>Proposed Rates</u></b>	
	<b><u>Present Rates</u></b>	<b><u>Company</u></b>	<b><u>Staff</u></b>
<b><u>MONTHLY USAGE CHARGE:</u></b>			
5/8" x 3/4" Meter	\$ 11.50	\$ 14.17	\$ 12.00
3/4" Meter	17.25	17.25	18.00
1" Meter	28.75	28.75	30.00
1-1/2" Meter	57.50	57.50	60.00
2" Meter	92.00	92.00	96.00
3" Meter	184.00	184.00	180.00
4" Meter	287.50	287.50	300.00
6" Meter	575.00	575.00	600.00
Gallons Included in Monthly Customer Charge:	0	0	0
<b><u>COMMODITY CHARGE:</u></b> (Per 1,000 gallons)			
0 to 3,000 gallons	\$2.00	\$2.46	\$2.00
3,001 to 8,000 gallons	2.25	2.77	2.75
All gallons in excess of 8,000	2.75	3.39	3.31
Standpipe, Bulk Water	N/A	3.39	3.31

**SERVICE LINE AND METER INSTALLATION CHARGES:**  
**(Refundable Pursuant to A.A.C. R14-2-405)**

	<u>Present Rates</u>	<u>Company Proposed</u>	<u>Service Line Charge</u>	<u>Meter Installation</u>	<u>Total</u>
5/8" x 3/4 " Meter	\$ 520.00	\$ 520.00	\$ 415.00	\$ 105.00	\$ 520.00
3/4 " Meter	620.00	620.00	415.00	205.00	620.00
1" Meter	730.00	730.00	465.00	265.00	730.00
1-1/2" Meter	995.00	995.00	520.00	475.00	995.00
2" Turbo Meter	1,795.00	1,795.00	800.00	995.00	1,795.00
2" Compound Meter	2,640.00	2,640.00	800.00	1,840.00	2,640.00
3" Turbo Meter	2,635.00	2,635.00	1,015.00	1,620.00	2,635.00
3" Compound Meter	3,630.00	3,630.00	1,135.00	2,495.00	3,630.00
4" Turbo Meter	4,000.00	4,000.00	1,430.00	2,570.00	4,000.00
4" Compound Meter	5,155.00	5,155.00	1,610.00	3,545.00	5,155.00
6" Turbo Meter	7,075.00	7,075.00	2,150.00	4,925.00	7,075.00
6" Compound Meter	5,090.00	5,090.00	2,270.00	6,820.00	9,090.00

	<u>Current Charges</u>	<u>Company Proposed</u>	<u>Staff Recommended</u>
<b><u>SERVICE CHARGES:</u></b>			
Establishment	\$25.00	\$25.00	\$25.00
Establishment (After Hours)	40.00	40.00	(b)
Reconnection (Delinquent)	40.00	40.00	40.00
After Hours Charge (Flat Rate)	N/A	N/A	30.00
Meter Test (If Correct)	25.00	25.00	25.00
Deposit	*	*	*
Deposit Interest	*	*	*
Re-Establishment (Within 12 Months)	**	**	**
Re-Establishment (Within 12 Months after Hours)	**	**	(b)
NSF Check	\$25.00	\$25.00	\$25.00
Deferred Payment – Per Month	1.50%	1.50%	1.50%
Meter Re-Read (If Correct)	\$30.00	\$30.00	\$20.00
Late Payment Charge Penalty	NT	1.50%	1.50%
Moving Customer Meter (Customer Request)	***	***	(a)
After Hours Service Charge (Rule A.A.C. R14-2-403.D)	Cost	Cost	(b)

**MONTHLY SERVICE CHARGE FOR FIRE SPRINKLER:**

4" or Smaller	N/A	N/A	****
6"	N/A	N/A	****
8"	N/A	N/A	****
10"	N/A	N/A	****
Larger than 10"	N/A	N/A	****
(a)	Cost to include parts, labor, overhead, and all applicable taxes, including income tax if applicable		
(b)	Staff recommends discontinuance.		
*	Per Commission Rule A.A.C. R14-2-403(B).		
**	Number of months off system times the monthly minimum per Commission Rule A.A.C. R14-2-403(D).		

1       \*\*\* Per Commission Rule A.A.C. R14-2-405.

2       \*\*\*\* 2.00% of monthly minimum for comparable sized meter connection, but no less than \$10.00 per month.  
3       The Service Charge for Fire Sprinklers is only applicable for service lines separate and distinct from the  
4       primary water service line.

5       20. The application proposed total operating revenue of \$131,365, an increase of \$23,125,  
6       or 21.36 percent, over the Company's adjusted test year revenue of \$108,240.

7       21. Staff recommends total base rates revenue of \$118,307, an increase of \$10,067, or  
8       9.30 percent, over the Company's adjusted test year revenue of \$108,240. In addition to base rates  
9       revenue, Staff recommends a WIFA loan surcharge that would generate revenue to service the WIFA  
10       debt.

11       Rate Base

12       22. The Company proposed an original cost rate base ("OCRB") of \$11,985. The  
13       Company did not propose a fair value rate base ("FVRB") that differs from OCRB.

14       23. Staff recommends several adjustments to the Company's proposed OCRB and  
15       recommends an OCRB of \$28,892. Staff increased the Meters and Meter Installation account by  
16       \$397, from \$15,757 to \$16,154; increased Accumulated Depreciation by \$17, from \$184,294 to  
17       \$184,311 to reflect depreciation expense from the end of the test year in the last rate case to the end  
18       of the test year in this case; increased accumulated amortization of contributions in aid of  
19       construction ("CIAC") by \$4,689, from \$19,435 to \$24,124; and increased working capital by  
20       \$11,838, from \$0 to \$11,838.

21       24. Staff notes that the Company did not have a written retirement policy requiring it to  
22       keep records of the actual cost of its plant retirements. Staff states that the Company has estimated  
23       the cost for some of its retirements using a trend analysis. Staff states that this led to a situation in the  
24       Company's last rate case wherein the estimated cost of a plant retirement removed from the  
25       accumulated depreciation account was more than the total accumulated depreciation balance for the  
26       account, which resulted in an accumulated depreciation balance of negative \$4,100. Staff notes that a  
27       negative accumulated depreciation balance increases rate base. Staff therefore recommends that the  
28       Company be required to file with the Commission a written plant retirement policy.

1           25.     The Company disagrees with Staff's proposed 12.50 percent depreciation rate for  
2 pumping equipment, asserting in its Reply to Staff's Response that an appropriate depreciation rate is  
3 instead 17.85 percent, based on its pumping equipment replacement history. In its Response, Staff  
4 states that it does not agree that the depreciation rate for pumping equipment should be changed from  
5 the 12.50 percent approved by the Commission unless the Company provides a depreciation study.

6           26.     If the Company wishes to request a change to depreciation rates, it may file a  
7 depreciation study in its next rate case in support thereof.

8           27.     The Company's FVRB is determined to be \$28,892.

9  
10 Operating Expense

11           28.     Based on its analysis, Staff recommends total test year Operating Expense of  
12 \$106,326. Staff's adjustments to various operating expenses resulted in a decrease of \$2,994 to the  
13 Company's request, from \$109,320 to \$106,326. Staff's adjustments decreased Repairs and  
14 Maintenance expense by \$2,590, from \$11,121 to \$8,531. Staff also reduced Office Supplies and  
15 Expense by \$250, from \$9,670 to \$9,420 in order to remove a non-recurring cost for relocating a  
16 computer from one location to another within the owner's residence due to a remodel. Another Staff  
17 adjustment decreased Contractual Services Expense by \$308, from \$4,512 to \$4,204 to remove late  
18 fees on invoices from Gaffin, CPA. Staff increased Water Testing Expense by \$100, from \$3,634 to  
19 \$3,734 to comport with the Staff Engineering recommendation. Staff made an adjustment to  
20 Miscellaneous Expense decreasing it by \$300, from \$1,387 to \$1,087 to remove costs incurred for a  
21 funeral. Staff increased Depreciation Expense by \$281, from \$4,986 to \$5,267, and increased Income  
22 Tax Expense by \$615, from negative \$108 to \$507, to reflect Staff's calculation of those expense  
23 amounts.

24           29.     The Company proposed \$7,500 in rate case expense, amortized over four years, for  
25 \$1,875 in annual rate case expense. Staff reduced Rate Case Expense by \$542, from \$1,875 to  
26 \$1,333, to reflect Staff's three year normalization of \$4,000 in rate case expense. Staff states that its  
27 recommendation is based on Staff's analysis of rate case expense for Class D water utilities, the fact  
28

1 that there are few contested issues, and the fact that the Company's last rate case filing was three  
2 years ago.

3         30. The Company disagrees with Staff's reduction to Rate Case Expense, stating that it  
4 has spent over \$6,500 to date, which does not include the costs of Company's Reply to Staff's  
5 Response, any future exceptions to a Recommended Order, and future attendance at the  
6 Commission's Open Meeting. The Company states that in Decision No. 71110, its last rate case, the  
7 Company was awarded \$13,500 in rate case expense annualized over 4 years, for annual rate case  
8 expense of \$3,375.

9         31. The Company's proposed rate case expense of \$7,500, normalized over four years is  
10 reasonable.

11         32. The Company's adjusted test year Operating Expense is \$106,868.

12  
13 Revenue Requirement

14         33. The Company's present water rates and charges produced test year Operating Revenue  
15 of \$108,240. With Operating Expense of \$106,868, the Company had total adjusted test year  
16 Operating Income of \$1,372, for a rate of return of 4.75 percent on FVRB, or an operating margin of  
17 1.27 percent.

18         34. The water rates and charges proposed by the Company would produce Operating  
19 Revenue of \$131,365 and adjusted Operating Expenses of \$114,018, resulting in an Operating  
20 Income of \$17,347 for a 144.74 percent rate of return on FVRB, or an operating margin of 13.21  
21 percent. The Company's proposal would constitute a \$23,125, or 21.36 percent, increase over test  
22 year revenues.

23         35. The base water rates and charges as recommended by Staff would produce total  
24 Operating Revenue of \$118,307 and adjusted Operating Expenses of \$108,547, resulting in an  
25 Operating Income of \$9,760, for a 33.78 percent rate of return on FVRB, or an 8.25 percent operating  
26 margin.<sup>1</sup> Staff's recommendation constitutes a \$10,067, or 9.30 percent, increase over adjusted test  
27

28 <sup>1</sup> Staff states that the Company's low rate base prevented Staff from relying solely upon a rate of return analysis to derive the Company's revenue requirement.

1 year revenues.

2           36. Staff recommends that in addition to its recommended base rates, the Company be  
3 authorized to implement a WIFA loan surcharge mechanism that will collect the additional revenue  
4 the Company will need to meet its interest and principal payments on a \$30,000 WIFA loan, using  
5 the actual loan amounts.

6           37. Staff states that its recommended revenue requirement, in conjunction with its  
7 recommended WIFA loan surcharge mechanism, provides the Company with sufficient cash flow to  
8 pay operating expenses; contingencies; principal, interest, and income taxes on the requested loan;  
9 and to meet the minimum 1.2 debt service coverage ("DSC")<sup>2</sup> ratio required by WIFA.

10           38. The water rates and charges approved herein will produce total Operating Revenue of  
11 \$118,849 and adjusted Operating Expenses of \$109,089, resulting in an Operating Income of \$9,760,  
12 for a 33.78 percent rate of return on FVRB, or an 8.21 percent operating margin, for a \$10,609, or  
13 9.80 percent, increase over adjusted test year revenues.

14 Rate Design

15           39. Staff recommends that the current inverted three tier rate design authorized in  
16 Decision No. 71110 remain in place, with a first tier cutoff of 3,000 gallons, and a second tier cutoff  
17 of 8,000 gallons. Staff's recommendation leaves in place the commodity charge of \$2.00 per  
18 thousand gallons for monthly usage of 3,000 gallons or less, and adds the additional revenue  
19 requirement primarily to the second tier of usage, from 3,001 to 8,000 gallons.

20           40. The Company disagrees with Staff's proposed a rate design. The Company states in  
21 its Comments that the current rate design did not generate the Company's authorized revenues in the  
22 first year the new rates were in effect, and asserts that the rate design has impacted the Company's  
23 revenues. Staff states in its Response that factors other than rate design, such as the number of  
24 customers and the downturn in the economy, may have affected the Company's revenue recovery.  
25

26 \_\_\_\_\_  
27 <sup>2</sup> DSC represents the number of times internally generated cash will cover required principal and interest payments on  
28 short term and long term debt. A DSC greater than 1.0 indicates that cash flow from operations is sufficient to cover debt obligations. A DSC less than 1.0 means that debt service obligations cannot be met by cash generated from operations and that another source of funds is needed to avoid default.

1 Staff made no adjustment to its rate design recommendation.

2 41. Staff's addition of the additional revenue requirement primarily to the second tier of  
3 usage is appropriate. We agree with Staff that factors other than rate design, such as the number of  
4 customers and the downturn in the economy, may have affected the Company's revenue recovery.  
5 Staff's proposed rate design is reasonable and will be adopted.

6 42. The Company's proposed rates would increase the median usage (6,611 gallons per  
7 month) residential customer's bill from \$25.62 to \$31.55, for an increase of \$5.93, or 23.1 percent.

8 43. Staff's recommended base rates would increase the median usage (6,611 gallons per  
9 month) residential customer's bill from \$25.62 to \$27.93, an increase of \$2.31, or 9.0 percent. Once  
10 the WIFA loan surcharge is implemented, the typical residential customer's bill would increase by the  
11 amount of the surcharge, approximately \$0.74, to \$28.67, for a total increase of \$3.05, or 11.9  
12 percent.

13 44. The rates approved herein will increase a median usage (6,611 gallons per month)  
14 residential customer's bill, from \$25.62 to \$28.08, an increase of \$2.46, or 9.60 percent. Once the  
15 WIFA loan surcharge is implemented, the typical residential customer's bill will increase by the  
16 amount of the surcharge, approximately \$0.74, to \$28.82, for a total increase of \$3.20, or 12.49  
17 percent.

18 **Financing Application**

19 45. Decision No. 71110 ordered the Company to install a minimum of 60,000 gallons of  
20 storage capacity, and to file a Certificate of Approval to Construct ("ATC") the storage capacity no  
21 later than June 30, 2010, and a Certificate of Approval of Construction ("AOC") of the storage  
22 capacity no later than December 31, 2010.

23 46. Decision No. 72437 (June 27, 2011) granted the Company's request for an extension  
24 of time to December 30, 2011, to file the AOC.

25 47. The financing application requests approval of a WIFA loan for the purpose of  
26 funding construction of a new 100,000 gallon storage tank, chlorine disinfection system, booster  
27 pump station, and electrical upgrades to support the new booster pumps. The Company estimates  
28

1 construction costs of \$200,000.

2 48. According to the Staff Report, after filing the financing application, the Company  
3 informed Staff that it does not believe the proposed storage capacity is needed, because its existing  
4 high yield (300 GPM) backup well has sufficient capacity to cover customer demand in the event of a  
5 primary well failure, and because the proposed storage tank and booster pump system additions  
6 would not be effective at improving fire flow within the system due to the fact that the aged  
7 distribution system, which was installed 30 to 40 years ago, cannot support the high pressure needed  
8 for adequate fire flow. The Company estimated a cost of \$30,000 for an alternative, on-site  
9 emergency generator with sufficient capacity to run the Company's 300 GPM backup well in lieu of  
10 adding the proposed storage tank and booster pump system additions.

11 49. Staff states that an emergency generator would improve the current system reliability  
12 by ensuring that the backup well would always be available to meet peak demand even during times  
13 when commercial power is lost, and that when commercial power is lost, a backup generator could  
14 prove to be more effective at improving fire flow than adding the proposed storage.

15 50. Based on the Company's expressed concerns and Staff's analysis, Staff recommends  
16 that the Company be given the option of installing an on-site emergency generator with sufficient  
17 capacity to run the Company's 300 GPM backup well in lieu of adding the additional storage  
18 capacity required by Decision No. 71110.

19 51. Staff reviewed the Company's estimates for the storage capacity option and the  
20 backup generator option and concluded that they are reasonable. Staff did not make a used and  
21 useful determination of the proposed plant, and did not recommend any particular future treatment for  
22 ratemaking or rate base purposes.

23 52. Staff states that a \$30,000, 20-year amortizing loan at a 5.25 percent interest rate would  
24 require payments estimated at \$202 per month, or \$2,674 annually. Based on its review the  
25 Company's unaudited 2010 financial statements, Staff states that the Company lacks sufficient  
26 earnings and operating cash flow to meet such a long-term debt obligation, and Staff therefore  
27 believes that a surcharge mechanism that provides funds for the debt service on the WIFA loan is  
28

1 appropriate. Staff recommended a surcharge mechanism calculation methodology as set forth in  
 2 Exhibit A, attached hereto and incorporated herein.

### 3 Staff Recommendations

4 53. Staff recommends approval of its recommended rates and charges.

5 54. Staff also recommends the following:

- 6 • that the Company be required to file with the Commission a written plant  
 7 retirement policy which at a minimum requires documentation that reflects (1) the  
 8 plant item retired, (2) the cost of the plant item, (3) documentation to support the  
 9 actual cost of the plant item, (4) whether the cost was actual or estimated, and (5)  
 10 the year the plant item was retired;
- 11 • that the Company be given the option of installing an on-site emergency generator  
 12 with sufficient capacity to run the Company's 300 GPM backup well in lieu of  
 13 adding the proposed storage tank and booster pump system additions;
- 14 • that if the Company decides to install an emergency generator for the 300 GPM  
 15 backup well in lieu of the storage tank and booster pump system, that the  
 16 Company be required to file documentation with Docket Control, as a compliance  
 17 item in this matter, demonstrating that the on-site emergency generator and  
 18 associated improvements have been completed within 120 days of this Decision;
- 19 • approval of the Staff-recommended \$30,000 financing and approval of a surcharge  
 20 mechanism that may result in a surcharge of \$0.74 per month per customer;
- 21 • that the actual amount of the WIFA loan surcharge be calculated based upon the  
 22 actual amount of the WIFA loan and actual number of customers;
- 23 • that the Company be required to file with the Commission a WIFA loan surcharge  
 24 tariff application that would enable the Company to meet its principal and interest  
 25 obligations on the proposed WIFA loan;
- 26 • that the Company be required to follow the methodology presented on Exhibit A to  
 27 calculate the additional revenue needed to meet its interest and principal payments  
 28 on the WIFA loan using actual loan amounts;
- that the Company be required to make a WIFA loan surcharge filing within 60  
 days of the loan closing;
- that approval of the loan and surcharge be rescinded if the Company has not drawn  
 funds from the loan within one year of the date of this Decision;
- that the Company be required to file with the Commission's Docket Control,  
 within 30 days of this Decision, as a compliance item in this Docket, a schedule of  
 its approved rates and charges;
- that the Company be required to file with Docket Control, as a compliance item in  
 this Docket, within 90 days of the effective date of this Decision, at least three  
 Best Management Practices ("BMP") in the form of tariffs that substantially  
 conform to the templates created by Staff, available at the Commission's website,  
 for the Commission's review and consideration. A maximum of two of these

1 BMPs may come from the "Public Awareness/Public Relations" or "Education and  
2 Training" categories of BMPs; and

- 3 • that the Company be required to continue to use the depreciation rates as presented  
4 in Exhibit B.

#### 4 **Compliance Issues**

5 55. A Staff review of the Commission's Consumer Services Section database for Orange  
6 Grove from January 1, 2008 to July 8, 2011, found zero complaints.

7 56. The Utilities Division Compliance Section database showed no delinquent compliance  
8 items for Orange Grove as of July 27, 2011.

9 57. Orange Grove is current on its property tax and sales tax payments.

10 58. Orange Grove is in good standing with the Commission's Corporations Division.

11 59. Based on an Arizona Department of Environmental Quality ("ADEQ") Compliance  
12 Status Report dated April 12, 2011, the Company's water system has no major deficiencies and is  
13 delivering water that meets water quality standards required by 40 CFR 141 and Title 18, Chapter 4  
14 of the Arizona Administrative Code.

15 60. Orange Grove's service area is not located within any Arizona Department of Water  
16 Resources ("ADWR") Active Management Area ("AMA"). As of March 3, 2011, Orange Grove was  
17 compliant with ADWR requirements governing water providers and community water systems.

18 61. The Company's non-account water was 1.46 percent for the 12 month period ending  
19 June 11, 2011, which is within acceptable limits.

20 62. Orange Grove has approved Curtailment Plan and Backflow Prevention Tariffs on file  
21 with the Commission.

#### 22 **Conclusions**

23 63. It is reasonable to require the Company to file with the Commission a written plant  
24 retirement policy which at a minimum requires documentation that reflects (1) the plant item retired,  
25 (2) the cost of the plant item, (3) documentation to support the actual cost of the plant item, (4)  
26 whether the cost was actual or estimated, and (5) the year the plant item was retired.

27 64. Decision No. 71110 ordered the Company to install a minimum of 60,000 gallons of  
28 storage capacity, and to file an ATC for the storage capacity no later than June 30, 2010, and an AOC

1 for the storage capacity no later than December 31, 2010. Staff's recommendation that the Company  
2 be given the option of installing an on-site emergency generator with sufficient capacity to run the  
3 Company's 300 GPM backup well in lieu of adding the ordered storage capacity is reasonable.

4 65. The requirements of Decision No. 71110 relating to installation of new storage  
5 capacity should be waived, conditioned upon the Company filing documentation with Docket  
6 Control, as a compliance item in this matter, within 120 days of this Decision, demonstrating that the  
7 on-site emergency generator and associated improvements have been completed.

8 66. The Company should be authorized to incur WIFA debt in an amount not to exceed  
9 \$30,000, for a term not to exceed 20 years, pursuant to a loan agreement with the Water  
10 Infrastructure Finance Authority of Arizona, at an interest rate not to exceed that available from the  
11 Water Infrastructure Finance Authority of Arizona, for the purpose of installing an on-site emergency  
12 generator and associated improvements with sufficient capacity to run the Company's 300 GPM  
13 backup well.

14 67. The Company should be authorized to engage in any transaction and to execute any  
15 documents necessary to effectuate the WIFA debt authorization granted herein.

16 68. The Company should be required to file with Docket Control, as a compliance item in  
17 this docket, within 60 days after the date of execution, copies of all executed financing documents  
18 related to the WIFA debt authorization granted herein.

19 69. The Company should be required to file with Docket Control, as a compliance item in  
20 this docket, within 60 days of closing the WIFA loan, an application using actual loan amounts, based  
21 on the methodology set forth in Exhibit A, requesting implementation of a WIFA debt surcharge to  
22 collect the additional revenue needed to meet its interest and principal payments on the WIFA loan.

23 70. Staff should be required, within 30 days of the Company's filing of the application  
24 requesting implementation of the WIFA debt surcharge, to calculate the appropriate WIFA debt  
25 surcharge using the methodology depicted on Exhibit A, and to prepare and file a Recommended  
26 Order for Commission consideration.

27  
28

1           71.     The Company should be required to file with Docket Control, within 30 days of the  
2 date of the Decision authorizing implementation of the WIFA debt surcharge, as a compliance item in  
3 this docket, a tariff explaining the terms and conditions of the WIFA debt surcharge.

4           72.     The Company should be required to file with Docket Control, within 30 days of the  
5 date of the Decision authorizing implementation of the WIFA debt surcharge, as a compliance item in  
6 this docket, documentation evidencing that Orange Grove Water Company, Inc. has opened a  
7 separate interest-bearing account in which it will deposit all WIFA debt surcharge monies  
8 collected from customers. The only disbursement of funds from this account should be to make debt  
9 service payments to WIFA.

10          73.     Following Commission approval of a WIFA debt surcharge, the Company should be  
11 required to file with Docket Control, by June 30 of each year until the WIFA debt is satisfied, as a  
12 compliance item in this docket, a report reconciling all WIFA debt surcharge monies billed and  
13 collected, along with copies of the prior year's monthly bank statements for the WIFA debt surcharge  
14 account.

15          74.     Any unused debt authorization granted in this proceeding should terminate on  
16 December 31, 2012.

17          75.     The Company should be required to continue to use the depreciation rates as presented  
18 on Exhibit B.

19          76.     We do not believe the Company should be required to file three BMPs as a  
20 compliance item in this Docket because the Company opposes this requirement and we are unaware  
21 of any evidence in the record that the Yuma area – where this Company's service territory resides – is  
22 experiencing or is subject to water shortages. If a water company opposes the requirement to adopt  
23 and file BMPs with Docket Control, we believe the Commission should carefully consider the  
24 circumstances of the case. In this case, there is a lack of evidence of water constraints in the  
25 Company's service area, and we decline to impose the requirement.

26          77.     Because an allowance for the property tax expense is included in the Company's rates  
27 and will be collected from its customers, the Commission seeks assurances from the Company that  
28 any taxes collected from ratepayers have been remitted to the appropriate taxing authority. It has

1 come to the Commission's attention that a number of water companies have been unwilling or unable  
2 to fulfill their obligation to pay the taxes that were collected from ratepayers, some for as many as  
3 twenty years. It is reasonable, therefore, that as a preventive measure the Company shall annually  
4 file, as part of its annual report, an affidavit with the Utilities Division attesting that the Company is  
5 current in paying its property taxes in Arizona.

6 **CONCLUSIONS OF LAW**

7 1. Orange Grove is a public service corporation within the meaning of Article XV of the  
8 Arizona Constitution and A.R.S. §§ 40-250, 40-251, 40-301, 40-302, and 40-303.

9 2. The Commission has jurisdiction over Orange Grove and the subject matter of the rate  
10 application and the financing application.

11 3. Notice of the financing application and the rate application were provided in the  
12 manner prescribed by law.

13 4. The rates and charges authorized herein are just and reasonable and should be  
14 approved without a hearing.

15 5. Staff's recommendations as set forth in Findings of Fact No. 54 are reasonable and  
16 should be adopted, with the exception of the recommendation regarding BMPs.

17 6. The financing approved herein is for lawful purposes within Orange Grove's corporate  
18 powers, is compatible with the public interest, with sound financial practices, and with the proper  
19 performance by Orange Grove of service as a public service corporation, and will not impair Orange  
20 Grove's ability to perform the service.

21 7. The financing approved herein is for the purposes stated in the application and is  
22 reasonably necessary for those purposes, and such purposes are not, wholly or in part, reasonably  
23 chargeable to operating expenses or to income.

24 8. Approval of the financing should not guarantee or imply any specific treatment of any  
25 capital additions for rate base or ratemaking purposes.

26 9. It is reasonable and in the public interest to rescind the financing authority granted  
27 herein if the Company has not drawn funds from the loan within one year of the date of this Decision.

28 ...

**ORDER**

IT IS THEREFORE ORDERED that Orange Grove Water Company, Inc. shall file, on or before December 30, 2011, a revised rate schedule setting forth the following rates and charges:

**MONTHLY USAGE CHARGE:**

5/8" x 3/4" Meter	\$ 12.15
3/4" Meter	18.15
1" Meter	30.15
1-1/2" Meter	60.15
2" Meter	96.15
3" Meter	180.15
4" Meter	300.15
6" Meter	600.15

**COMMODITY CHARGE:** (Per 1,000 gallons)

0 to 3,000 gallons	\$2.00
3,001 to 8,000 gallons	2.75
All gallons in excess of 8,000	3.31
Standpipe, Bulk Water	3.31

**SERVICE LINE AND METER INSTALLATION CHARGES:**  
(Refundable Pursuant to A.A.C. R14-2-405)

	Service Line Charge	Meter Installation*	Total
5/8" x 3/4 " Meter	\$ 415.00	\$ 105.00	\$ 520.00
3/4 " Meter	415.00	205.00	620.00
1" Meter	465.00	265.00	730.00
1-1/2" Meter	520.00	475.00	995.00
2" Turbo Meter	800.00	995.00	1,795.00
2" Compound Meter	800.00	1,840.00	2,640.00
3" Turbo Meter	1,015.00	1,620.00	2,635.00
3" Compound Meter	1,135.00	2,495.00	3,630.00
4" Turbo Meter	1,430.00	2,570.00	4,000.00
4" Compound Meter	1,610.00	3,545.00	5,155.00
6" Turbo Meter	2,150.00	4,925.00	7,075.00
6" Compound Meter	2,270.00	6,820.00	9,090.00

**SERVICE CHARGES:**

Establishment	\$25.00
Reconnection (Delinquent)	40.00
After Hours Charge (Flat Rate)	30.00
Meter Test (If Correct)	25.00
Deposit	*
Deposit Interest	*
Re-Establishment (Within 12 Months)	**
NSF Check	\$25.00
Deferred Payment – Per Month	1.50%
Meter Re-Read (If Correct)	\$20.00
Late Payment Charge Penalty	1.50%

1	Moving Customer Meter (Customer Request)	***
2	4" or Smaller	****
	6"	****
3	8"	****
	10"	****
4	Larger than 10"	****

\* Per Commission Rule A.A.C. R14-2-403(B).

\*\* Number of months off system times the monthly minimum per Commission Rule A.A.C. R14-2-403(D).

\*\*\* Cost to include parts, labor, overhead, and all applicable taxes, including income tax if applicable.

\*\*\*\* 2.00% of monthly minimum for comparable sized meter connection, but no less than \$10.00 per month. The Service Charge for Fire Sprinklers is only applicable for service lines separate and distinct from the primary water service line.

IT IS FURTHER ORDERED that Orange Grove Water Company, Inc. shall notify its customers of the water rates and charges approved herein, and their effective date, by means of an insert in its next monthly billing. Orange Grove Water Company, Inc. shall file a copy of the notice when sent to its customers with Docket Control as a compliance item in this docket.

IT IS FURTHER ORDERED that the above rates and charges shall be effective for all services provided on and after January 1, 2012.

IT IS FURTHER ORDERED that Orange Grove Water Company, Inc., in addition to the collection of its regular rates and charges, shall collect from its customers their proportionate share of any privilege, sale, or use tax as provided in A.A.C. R14-2-409(D).

IT IS FURTHER ORDERED that Orange Grove Water Company, Inc. is hereby authorized to incur debt in an amount not to exceed \$30,000, for a term not to exceed 20 years, pursuant to a loan agreement with the Water Infrastructure Finance Authority of Arizona, at an interest rate not to exceed that available from the Water Infrastructure Finance Authority of Arizona, for the purpose of installing an on-site emergency generator and associated improvements with sufficient capacity to run the Company's 300 GPM backup well.

IT IS FURTHER ORDERED that the requirements of Decision No. 71110 relating to installation of new storage capacity are hereby waived, conditioned upon Orange Grove Water Company, Inc. filing documentation with Docket Control within 120 days as a compliance item in this matter, demonstrating that the on-site emergency generator and associated improvements discussed herein have been completed.

1 IT IS FURTHER ORDERED that Orange Grove Water Company, Inc. is hereby authorized to  
2 engage in any transaction and to execute any documents necessary to effectuate the WIFA debt  
3 authorization granted herein.

4 IT IS FURTHER ORDERED that Orange Grove Water Company, Inc. shall, within 60 days  
5 after the date of execution, file with Docket Control, as a compliance item in this docket, copies of all  
6 executed financing documents related to the WIFA debt authorization granted herein.

7 IT IS FURTHER ORDERED that Orange Grove Water Company, Inc. shall file with Docket  
8 Control as a compliance item in this docket, within 60 days of closing the WIFA loan, an application  
9 using actual loan amounts, based on the methodology set forth in Exhibit A, requesting  
10 implementation of a WIFA debt surcharge to collect the additional revenue needed to meet its interest  
11 and principal payments on the WIFA loan.

12 IT IS FURTHER ORDERED that within 30 days of Orange Grove Water Company, Inc.'s  
13 filing of the application requesting implementation of the WIFA debt surcharge, Staff shall calculate  
14 the appropriate WIFA debt surcharge, and shall prepare and file a Recommended Order for  
15 Commission consideration.

16 IT IS FURTHER ORDERED that Orange Grove Water Company, Inc. shall file with Docket  
17 Control, within 30 days of the date of the Decision authorizing implementation of the WIFA debt  
18 surcharge, as a compliance item in this docket, a tariff explaining the terms and conditions of the  
19 WIFA debt surcharge.

20 IT IS FURTHER ORDERED that Orange Grove Water Company, Inc. shall file with Docket  
21 Control, within 30 days of the date of the Decision authorizing implementation of the WIFA debt  
22 surcharge, as a compliance item in this docket, documentation evidencing that Orange Grove Water  
23 Company, Inc. has opened a separate interest-bearing account in which it shall deposit all WIFA  
24 debt surcharge monies collected from customers. The only disbursement of funds from this account  
25 shall be to make debt service payments to WIFA.

26 IT IS FURTHER ORDERED that following Commission approval of a WIFA debt surcharge,  
27 Orange Grove Water Company, Inc. shall file with Docket Control, by June 30 of each year until the  
28 WIFA loan is paid off, as a compliance item in this docket, a report reconciling all WIFA debt

1 surcharge monies billed and collected, along with copies of the prior year's monthly bank statements  
2 for the WIFA debt surcharge account.

3 IT IS FURTHER ORDERED that any unused debt authorization granted in this proceeding  
4 shall terminate on December 31, 2012.

5 IT IS FURTHER ORDERED that that approval of the financing set forth herein does not  
6 constitute or imply approval or disapproval by the Commission of any particular expenditure of the  
7 proceeds derived thereby for purposes of establishing just and reasonable rates.

8 IT IS FURTHER ORDERED that Orange Grove Water Company, Inc. shall file with Docket  
9 Control within 60 days as a compliance item in this docket, a written plant retirement policy which at  
10 a minimum requires documentation that reflects (1) the plant item retired, (2) the cost of the plant  
11 item, (3) documentation to support the actual cost of the plant item, (4) whether the cost was actual or  
12 estimated, and (5) the year the plant item was retired.

13 IT IS FURTHER ORDERED that Orange Grove Water Company, Inc. shall adopt the  
14 depreciation rates recommended by Staff as set forth in Exhibit B.

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1 IT IS FURTHER ORDERED that Orange Grove Water Company, Inc. shall annually file, as  
2 part of its Annual Report, an affidavit with the Utilities Division attesting that it is current in paying  
3 its property taxes in Arizona.

4 IT IS FURTHER ORDERED that this Decision shall become effective immediately.

5 BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

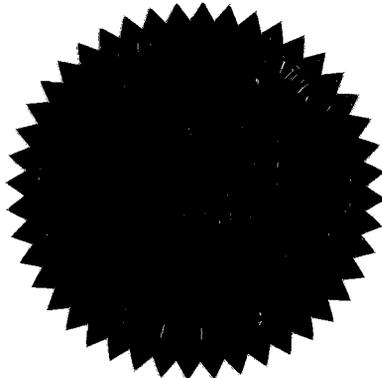
6  
7 Gary A. Pierce  
8 CHAIRMAN

[Signature]  
COMMISSIONER

9 [Signature]  
10 COMMISSIONER

COMMISSIONER

[Signature]  
COMMISSIONER



11  
12 IN WITNESS WHEREOF, I, ERNEST G. JOHNSON,  
13 Executive Director of the Arizona Corporation Commission,  
14 have hereunto set my hand and caused the official seal of the  
15 Commission to be affixed at the Capitol, in the City of Phoenix,  
16 this 6th day of JANUARY 2012

[Signature]  
17 ERNEST G. JOHNSON  
18 EXECUTIVE DIRECTOR

19 DISSENT [Signature]

20 DISSENT \_\_\_\_\_

1 SERVICE LIST FOR: ORANGE GROVE WATER COMPANY, INC.

2 DOCKET NOS.: W-02237A-11-0084 and W-02237A-11-0180

3 Steve Wene  
4 MOYES SELLERS & HENDRICKS LTD.  
5 1850 N. Central Ave., Ste. 100  
6 Phoenix, AZ 85004

7 Kathleen Day, President  
8 ORANGE GROVE WATER CO.  
9 P.O. Box 889  
10 Yuma, AZ 85366

11 Janice Alward, Chief Counsel  
12 Legal Division  
13 ARIZONA CORPORATION COMMISSION  
14 1200 West Washington Street  
15 Phoenix, AZ 85007

16 Steven M. Olea, Director  
17 Utilities Division  
18 ARIZONA CORPORATION COMMISSION  
19 1200 West Washington Street  
20 Phoenix, AZ 85007

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**EXHIBIT A****INSTRUCTIONS TO CALCULATE THE ANNUAL SURCHARGE REVENUE REQUIREMENT ON THE LOAN***Instruction for Step 1***Step 1. Find the Annual Payment on the Loan**

Refer to Table A, the Conversion Factor Table (included at the end of this section on page 9). Reading the table from top to bottom, find the interest rate in column A that is equal to the stated annual interest rate of the loan. Reading across the table, find the Annual Payment Conversion Factor in Column B that corresponds with the loan interest rate (in the event that the loan interest rate is different from the interest rates in Table A, use the next higher interest rate that can be found in Table A). Multiply that annual payment conversion factor by the total amount of the loan to calculate the annual debt service on the loan.

*Result*

Total amount of the loan  
 (\*) Times annual payment conversion factor  
 (=) Equals annual debt service on the loan

*Instruction for Step 2***Step 2. Find the Annual Interest Payment on the Loan**

Refer to Table A and find the annual interest payment conversion factor in Column C that corresponds with the stated annual interest rate of the loan. Multiply the annual interest payment conversion factor by the total amount of the loan to calculate the annual interest expense on the loan.

*Result*

Annual interest payment conversion factor  
 (\*) Times total amount of the loan  
 (=) Equals annual interest expense on the loan (rounded)

*Instruction for Step 3*

Step 3. Find the Annual Principal Payment on the Loan

Refer to Table A and find the annual principal payment conversion factor in Column D that corresponds with the stated annual interest rate of the loan. Multiply the annual principal payment conversion factor by the total amount of the loan to calculate the annual principal payment on the loan.

*Result*

Annual principal payment conversion factor  
(\* ) Times total amount of the loan  
(=) Equals annual principal payment on the loan

*Instruction for Step 4*

Step 4. Find the Gross Revenue Conversion Factor (GRCF)

Obtain the Company's latest permanent rate case decision and find the GRCF utilized for that case. In the alternative, calculate the GRCF using the formula below. The GRCF is used in step 5.

*Result*

$$\text{GRCF} = \frac{1}{1 - \text{Effective incremental income tax rate}}$$

*Instruction for Step 5*

Step 5. Find the Incremental Income Tax Factor

Subtract one from the GRCF to obtain the incremental income tax factor as shown in the calculation below:

*Result*

$$\text{Incremental Income Tax Factor} = \text{GRCF} - 1$$

*Instruction for Step 6*

Step 6. Find the Annual Income Tax Component of the Surcharge Revenue

Multiply the incremental income tax factor found in step 5 by the annual principal payment on the loan determined in step 3 to calculate the income tax component of the annual surcharge revenue.

*Result*

Incremental income tax conversion factor

(\*) Times the annual principal payment on the loan

(=) Equals the annual income tax component of the annual surcharge revenue

*Instruction for Step 7*

Step 7. Find the Debt Service Component of the Annual Surcharge Revenue

Add the annual interest expense on the loan determined in step 2 to the annual principal payment determined in step 3. The sum is the debt service component of the annual surcharge revenue.

*Result*

Annual interest payment on the loan (Step 2)

(+) Plus annual principal payment (Step 3)

(=) Equals the debt service component of the annual surcharge revenue

*Instruction for Step 8*

Step 8. Find the Total Annual Surcharge Revenue Requirement Needed for the Loan.

Add the annual income tax component determined in step 6 to the annual debt service component determined in step 7. The sum equals the annual surcharge revenue requirement for the loan.

*Result*

Annual income tax component (Step 6)

(+) Plus annual principal & interest payment (Step 7)

(=) Equals the total annual surcharge revenue requirement for the loan.

Step 9. Find the equivalent bills.

Multiply the NARUC meter capacity multiplier by the number of current customers and by the number of months per year. The sum of the products equals the equivalent bills.

*Result*

Col A	Col B	Col C	Col D	Col E
Meter Size	NARUC Meter Capacity Multiplier	Number of Customers	Number of Months In Year	Equivalent Bills Col B x C x D
5/8"x 3/4" Meter	1	0	12	0
3/4" Meter	1.5	0	12	0
1" Meter	2.5	0	12	0
1 1/2" Meter	5	0	12	0
2" Meter	8	0	12	0
3" Meter	15	0	12	0
4" Meter	25	0	12	0
6" Meter	50	0	12	0
			<b>Total</b>	<b>0</b>

*Instruction for Step 10*Step 10. Find the monthly surcharge for 5/8" x 3/4" customers.

Divide the result obtained in step 1 by the number of equivalent bills calculated in step 9 to obtain the monthly surcharge for 5/8" x 3/4" customers.

*Result*

Total annual payment on loan (Step 1)  
 (÷) Divided by number of equivalent bills (Step 2)  
 (=) Total monthly surcharge for 5/8" x 3/4" customers

*Instruction for Step 11*Step 11. Find the monthly surcharge for remaining meter size customers.

Multiply the Result obtained in step 10 by the NARUC meter capacity multipliers to obtain the monthly surcharges for all other meter sizes.

*Result*

Col A	Col B	Col C	Col D
Meter Size	NARUC Meter Capacity Multiplier	5/8" x 3/4" Customers' Surcharge	Surcharge by Meter Size Col B x C
5/8"x 3/4" Meter	1	\$0.00	\$0.00
3/4" Meter	1.5	\$0.00	\$0.00
1" Meter	2.5	\$0.00	\$0.00
1½" Meter	5	\$0.00	\$0.00
2" Meter	8	\$0.00	\$0.00
3" Meter	15	\$0.00	\$0.00
4" Meter	25	\$0.00	\$0.00
6" Meter	50	\$0.00	\$0.00

**Example - For Illustrative Purposes Only**

Loan amount: \$30,000  
 Term: 20 years  
 Stated Annual Interest Rate: 5.25%

Step 1. Find the Annual Payment on the Loan

Refer to Table A, the Conversion Factor Table. Reading the table from top to bottom, find the interest rate in Column A that is equal to the stated annual interest rate of the loan. Reading across the table, find the Annual Payment Conversion Factor in Column B that corresponds with the loan interest rate (in the event that the loan interest rate is different from the interest rates in Table A, use the next higher interest rate that can be found in Table A). Multiply that annual payment conversion factor by the total amount of the loan to calculate the annual debt service on the loan.

*Result*

0.0809	Annual payment conversion factor
x \$30,000	(*) Times total amount of the loan
\$ 2,427	(=) Equals annual debt service on the loan (rounded)

**Step 2. Find the Annual Interest Payment on the Loan**

Refer to Table A and find the annual interest payment conversion factor in Column C that corresponds with the stated annual interest rate of the loan. Multiply the annual interest payment conversion factor by the total amount of the loan to calculate the annual interest expense on the loan.

*Result*

0.0518	Annual interest payment conversion factor
<u>x \$30,000</u>	(* ) Times total amount of the loan
\$ 1,554	(=) Equals annual interest expense on the loan (rounded)

**Step 3. Find the Annual Principal Payment on the Loan**

Refer to Table A and find the annual principal payment conversion factor in Column D that corresponds with the stated annual interest rate of the loan. Multiply the annual principal payment conversion factor by the total amount of the loan to calculate the annual principal payment on the loan.

*Result*

0.0291	Annual principal payment conversion factor
<u>x \$30,000</u>	(* ) Times total amount of the loan
\$ 873	(=) Equals annual principal payment on the loan

**Step 4. Find the Gross Revenue Conversion Factor (GRCF)**

The GRCF of 1.28318 can be found on Revised Schedule CSB-3, page 8, line 6. In the alternative, the GRCF can be calculated using the formula below. The GRCF calculated is used in step 5.

$$\text{GRCF} = \frac{1}{1 - \text{Effective incremental income tax rate}}$$

$$\text{GRCF} = \frac{1}{1 - 0.220688^2} = \frac{1}{0.779312} = 1.28318$$

<sup>2</sup> In this example, the "effective incremental income tax rate" is equal to the "combined federal and state income tax rate" shown on Schedule CSB-3, page 8, line 4.

Step 5. Find the Incremental Income Tax Factor

The incremental income tax factor is calculated below:

$$\begin{aligned} \text{Incremental Income Tax Factor} &= \text{GRCF} - 1 \\ &= 1.28318 - 1 \\ &= 0.28318 \end{aligned}$$

Step 6. Find the Annual Income Tax Component of the Surcharge Revenue

Multiply the incremental income tax factor by the annual principal payment on the loan determined in step 3 to calculate the income tax component of the annual surcharge revenue.

*Result*

0.28318	Incremental income tax conversion factor
<u>x \$ 873</u>	(*) Times the annual principal payment on the loan
\$247.22	(=) Equals the annual inc. tax component of the annual surcharge revenue

Step 7. Find the Debt Service Component of the Annual Surcharge Revenue

Add the annual interest expense on the loan determined in step 2 to the annual principal payment determined in step 3. The sum is the debt service component of the annual surcharge revenue.

*Result*

\$ 1,554	Annual interest payment on the loan (Step 2)
<u>+ 873</u>	(+) Plus annual principal payment (Step 3)
\$ 2,427	(=) Equals the debt service component of the annual surcharge revenue

**Step 8. Find the Total Annual Surcharge Revenue Requirement Needed for the Loan.**

Add the annual income tax component determined in step 6 to the annual debt service component determined in step 7. The sum equals the annual surcharge revenue requirement for the loan.

*Result*

\$ 247.22	Annual income tax component (Step 6)
+ \$2,427.00	(+) Plus annual principal & interest payment (Step 7)
<u>\$2,674.22</u>	(=) Equals the total annual surcharge revenue requirement for the loan.

**Step 9. Find the equivalent bills.**

Multiply the NARUC meter capacity multiplier by the number of current customers and by the number of months per year. The sum of the products equals the equivalent bills.

*Result*

Col A	Col B	Col C	Col D	Col E
Meter Size	NARUC Meter Capacity Multiplier	Number of Customers	Number of Months in Year	Equivalents Bills Col B x C x D
5/8"x 3/4" Meter	1	303	12	3,636
3/4" Meter	1.5	0	12	0
1" Meter	2.5	0	12	0
1½" Meter	5	0	12	0
2" Meter	8	0	12	0
3" Meter	15	0	12	0
4" Meter	25	0	12	0
6" Meter	50	0	12	0
			<b>Total</b>	<b>3,636</b>

**Step 10. Find the monthly surcharge for 5/8" x 3/4" customers.**

Divide the result obtained in step 8 by the number of equivalent bills calculated in step 9 to obtain the monthly surcharge for 5/8" x 3/4" customers.

*Result*

\$2,674.22	Total annual surcharge revenue requirement for the loan (Step 8)
÷ 3,636	Number of equivalent bills (Step 9)
<u>\$ 0.74</u>	(=) Equals the total annual surcharge rev. requirement for the loan (rounded).

Step 11. Find the monthly surcharge for the remaining meter size customers.

Multiply the result obtained in step 10 by the NARUC meter capacity multipliers to obtain the monthly surcharge for all other meter sizes.

Col A	Col B	Col C	Col D
Meter Size	NARUC Meter Capacity Multiplier	5/8" x 3/4" Customer Surcharge	Surcharge by Meter Size Col B X C
5/8"x 3/4" Meter	1	0.74	\$ 0.74
3/4" Meter	1.5	0.74	\$ 1.10
1" Meter	2.5	0.74	\$ 1.84
1½" Meter	5	0.74	\$ 3.68
2" Meter	8	0.74	\$ 5.88
3" Meter	15	0.74	\$ 11.03
4" Meter	25	0.74	\$ 18.39
6" Meter	50	0.74	\$ 36.77

**TABLE A**  
Conversion Factor Table (Based on a 20-year Loan)

Column A	Column B	Column C	Column D
Annual Interest	Annual Payment Conversion Factor	Annual Interest Payment Conversion Factor	Annual Principal Payment Conversion Factor
3.50%	0.0696	0.0344	0.0352
3.75%	0.0711	0.0369	0.0342
4.00%	0.0727	0.0394	0.0333
4.25%	0.0743	0.0419	0.0324
4.50%	0.0759	0.0444	0.0316
4.75%	0.0775	0.0468	0.0307
5.00%	0.0792	0.0493	0.0299
5.25%	0.0809	0.0518	0.0291
5.50%	0.0825	0.0543	0.0283
5.75%	0.0843	0.0568	0.0275
6.00%	0.0860	0.0593	0.0267
6.25%	0.0877	0.0618	0.0259
6.50%	0.0895	0.0643	0.0252
6.75%	0.0912	0.0668	0.0245
7.00%	0.0930	0.0692	0.0238
7.25%	0.0948	0.0717	0.0231
7.50%	0.0967	0.0742	0.0224
7.75%	0.0985	0.0767	0.0218
8.00%	0.1004	0.0792	0.0211

**EXHIBIT B****Table B. Depreciation Rate Table for Water Companies**

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00