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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

BOB STUMP - Chairman
GARY PIERCE
BRENDA BURNS
BOB BURNS
SUSAN BITTER SMITH

DOCKET NO. W-02105A-13-0415
2014 MAY 21 PM 1 10

ORIGINAL

IN THE MATTER OF THE APPLICATION OF
MT. TIPTON WATER COMPANY, INC. FOR
A PERMANENT INCREASE IN ITS WATER
RATES AND CHARGES.

DOCKET NO. W-02105A-13-0415

STAFF'S NOTICE OF FILING DIRECT
TESTIMONY

Staff of the Arizona Corporation Commission ("Staff") hereby files the Direct Testimony of
Briton A. Baxter and Dorothy Hains in the above docket.

RESPECTFULLY SUBMITTED this 21st day of May 2014.

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Original and thirteen (13) copies
of the foregoing filed this
21st day of May 2014 with:

Arizona Corporation Commission
DOCKETED

MAY 21 2014

Docket Control
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DIRECT

TESTIMONY

OF

BRITON A. BAXTER

PUBLIC UTILITIES ANALYST IV

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MAY 21, 2014

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EXECUTIVE SUMMARY
MT. TIPTON WATER COMPANY, INC.
DOCKET NO. W-02105A-13-0415

Mt. Tipton Water Company, Inc. ("Mt. Tipton" or "Company") is an Arizona non-profit corporation providing water services to approximately 662 customers located approximately 35 miles northeast of the city of Kingman, in the town of Dolan Springs, Mohave County, Arizona. The Company's current rates and charges were authorized by the Arizona Corporation Commission ("Commission") in Decision No. 72001, dated December 10, 2010.

Mt. Tipton proposes an increase to its revenues of \$46,133 or 13.58 percent over its test year revenues of \$339,594 to a total of \$385,727. The Company's proposal would result in an operating income of \$98,029 for a 12.98 percent rate of return on its reported original cost rate base ("OCRB") of \$755,229. The Company's proposed rates would increase the monthly bill for a typical 5/8 x 3/4-inch meter residential customer with a median consumption of 2,364 gallons from \$29.46 to \$33.27, an increase of \$3.81 or 12.95 percent.

Staff recommends an increase to Mt. Tipton's revenues of \$19,529 or 5.75 percent over the test year revenues of \$339,594 to a total of \$359,123. Staff's recommended revenue requirement results in an operating income of \$72,403 or a rate of return of 14.40 percent on Staff's adjusted OCRB of \$502,801. Staff's recommended revenue requirement was derived to provide the Company with adequate cash flow to meet a Debt Service Coverage Ratio of 1.20, required for its debt covenant with the Water Infrastructure Finance Authority of Arizona. Staff's recommended rates would increase the monthly bill for a typical 5/8 x 3/4-inch meter residential customer with a median consumption of 2,364 gallons from \$29.46 to \$30.21, an increase of \$.75 or 2.55 percent.

Staff recommends that a Delinquent Property Tax Surcharge be approved to address the growing delinquent property tax bill, which has increased by \$112,873 from \$84,560 in 2008 to \$197,433 in April of 2014. Further, continued non-payment of the delinquent taxes will only result in a much higher bill in the future that could lead to an even greater financial hardship on the Company and possibly lead to insolvency. Because Mt. Tipton is owned by a Home Owners Association, Staff recommends a surcharge that would make the Company current on all property taxes in 18 months. Staff's recommended surcharge will increase the monthly bill of a residential customer on a 5/8 x 3/4-inch meter an additional \$18.03 per month.

1 **INTRODUCTION**

2 **Q. Please state your name, occupation, and business address.**

3 A. My name is Briton A. Baxter. I am a Public Utilities Analyst IV employed by the Arizona
4 Corporation Commission (“ACC” or “Commission”) in the Utilities Division (“Staff”). My
5 business address is 1200 West Washington Street, Phoenix, Arizona 85007.

6

7 **Q. Briefly describe your responsibilities as a Public Utilities Analyst IV.**

8 A. I am responsible for the examination and verification of financial and statistical information
9 included in utility rate applications. In addition, I develop revenue requirements, prepare
10 written reports, testimonies, and schedules that include Staff recommendations to the
11 Commission. I am also responsible for testifying at formal hearings on these matters.

12

13 **Q. Please describe your educational background and professional experience.**

14 A. I graduated from Northern Arizona University, with a Bachelor of Science degree in
15 Accountancy with a public accounting emphasis. Prior to joining the Commission in
16 October of 2013, I spent 10 years with the Arizona Office of the Auditor General. I have
17 experience conducting and leading performance audits of school districts and preparing
18 statewide reports on classroom spending, which required a large amount of data collection,
19 validation and analysis including financial reports and budgets.

20

21 **Q. What is the scope of your testimony in this case?**

22 A. I am presenting Staff’s analysis and recommendations in the areas of rate base and operating
23 revenues, expenses, and rate design regarding the Mt. Tipton Water Company (“Mt. Tipton”
24 or “Company”) application for a permanent rate increase. Staff witness, Dorothy Hains, is
25 presenting Staff’s engineering analysis and recommendations.

26

1 **Q. What is the basis of your recommendations?**

2 A. I performed a regulatory audit of the Company's application to determine whether sufficient,
3 relevant, and reliable evidence exists to support the Company's requested rate increase. The
4 regulatory audit consisted of examining and testing the financial information, accounting
5 records, and other supporting documentation and verifying that the accounting principles
6 applied were in accordance with the Commission-adopted National Association of Regulatory
7 Utility Commissioners ("NARUC") Uniform System of Accounts ("USOA").
8

9 **BACKGROUND**

10 **Q. Please provide a brief description of Mt. Tipton and the service it provides.**

11 A. The Company is an Arizona non-profit corporation providing water services to
12 approximately 662 customers located approximately 35 miles northeast of the city of
13 Kingman, in the town of Dolan Springs, Mohave County, Arizona. The Company's current
14 rates and charges were authorized by the Commission in Decision No. 72001, dated
15 December 10, 2010.
16

17 **Q. What are the primary reasons for Mt. Tipton's requested permanent rate increase?**

18 A. First, Mt. Tipton was ordered to file a rate case within three years of the December 1, 2010,
19 effective date of Decision No. 72001. The Company also has delinquent property tax and
20 hook-up fee accounting problems that need to be resolved. I will address each separately.
21

22 **DELINQUENT PROPERTY TAX ISSUE**

23 **Q. Please describe the delinquent property tax issue.**

24 A. As of April 22, 2014, Mt. Tipton owes Mohave County ("County") \$197,433 in property
25 taxes that the Company failed to pay from 2004 through 2009. The Company has been

1 current on property taxes since 2009. The level of delinquent property taxes is growing at a
2 rate of 1.33 percent per month from fees and penalties.

3
4 **Q. Please provide some background to the steps that the Company has taken to address**
5 **the delinquent property tax issue?**

6 A. In an emergency rate case, Decision No. 70559 dated October 23, 2008, Mt. Tipton was
7 ordered to enter into discussions with Mohave County to either have the \$84,560 property
8 tax debt forgiven or to establish a payment plan. On January 22, 2009, the Company met
9 with the County and was told that the debt would not be forgiven nor would a payment plan
10 be established. The next step the Company took was to request approval to sell a redundant
11 office building. Decision No. 70836 dated March, 17, 2009, granted the Company approval
12 to sell the building. The proceeds were designated to (1) pay its delinquent property taxes, (2)
13 reimburse the Hook-Up Fee fund account, and (3) reduce the Company's indebtedness as
14 required by the Water Infrastructure Finance Authority of Arizona ("WIFA"). To date the
15 building has not been sold, but remains on the market.

16
17 **Q. How much has the level of delinquent property taxes increased from the years 2008 to**
18 **2014?**

19 A. The delinquent property tax bill has increased by \$112,873 from \$84,560 in 2008 to \$197,433
20 in April of 2014.

21
22 **Q. What is the Company currently requesting to address the delinquent property tax bill?**

23 A. The Company is requesting a surcharge, and for permission to use the \$8,100 it saved for
24 repayment of the misspent Hook-Up Fees to instead be used to pay down its delinquent
25 property taxes. Based on the testimony of Michelle Monzillo, the Company believes that with
26 specific monies set aside to address the property tax issue the County may agree to a payment

1 plan. Staff notes that interest would continue to accrue monthly at a rate of 1.33 percent
2 even if the Company were able to enter into a repayment arrangement.

3
4 **Q. Does Staff typically recommend a surcharge to recover delinquent property taxes?**

5 A. No.

6
7 **Q. Is a property tax surcharge warranted in this case?**

8 A. Yes. Approval of a "Delinquent Property Tax Surcharge" would be in the public interest to
9 address the delinquent property taxes because Mt. Tipton is owned by a non-profit home
10 owners association. Therefore, the escalating cost of the delinquent property tax bill must
11 ultimately be borne by the owners who are "in effect" the customers. Continued non-
12 payment of the delinquent taxes will only result in a much higher bill in the future. This
13 could lead to a financial hardship on the Company and possibly lead to insolvency.

14
15 **Q. Please discuss Staff's recommended Delinquent Property Tax Surcharge.**

16 A. Staff recommends a surcharge that would allow the Company to generate enough funds in 18
17 months to repay the full amount of delinquent property taxes by charging ratepayers a
18 monthly surcharge of \$18.03. This surcharge would increase the typical residential 5/8 x 3/4-
19 inch meter bill with a median usage of 2,364 gallons, including Staff's recommended rate
20 increase from \$29.46 to \$48.24, for an increase \$18.78 or 63.74 percent.

21
22 **Q. What conditions does Staff recommend, related to the Delinquent Property Tax
23 Surcharge?**

24 A. Staff recommends:

25 1. That the Company be required to engage in immediate discussions with Mohave
26 County officials and any and all lien holders to establish a repayment plan.

- 1 2. That the Surcharge not become effective until step (1) has been completed and the
2 Company has filed, as a compliance item with the Commission's Docket Control, a
3 copy of the agreement(s) with the County and lien holder(s).
- 4 3. That the Company be required to place all funds collected under the Delinquent
5 Property Tax Surcharge in a separate interest-bearing trust account and use those
6 funds only to retire the delinquent property taxes.
- 7 4. That as a compliance item, the Company file with the Commission's Docket Control
8 a quarterly report that shows:
 - 9 a. the total amount collected from the surcharge,
 - 10 b. the total amount paid towards delinquent property taxes, and
 - 11 c. the current balance of the delinquent property taxes.
- 12 5. That the reporting begin after three months of surcharge billings and continue for as
13 long as the Delinquent Property Tax Surcharge is collected.
- 14 6. Under no instance will the Company be allowed to over-recover on the delinquent
15 property taxes.
- 16 7. Further, the requirements in Decision No. 70836 related to the proceeds from the
17 sale of property should remain in place should this property be sold and the
18 Delinquent Property Tax Surcharge should be adjusted accordingly to reflect the
19 utilization of these proceeds to reduce the Company's delinquent property tax
20 liability, reimburse the Hook-Up Fee fund account, and reduce the Company's
21 indebtedness as required by WIFA. Any additional proceeds remaining after meeting
22 the requirements of Decision No. 70836 shall be refunded to the ratepayers in a
23 manner approved by the Commission.
- 24

1 **HOOK-UP FEE ISSUE**

2 **Q. Please describe the Hook-up Fee issue.**

3 A. In Decision No. 70837, dated March 17, 2009, the Company was found to be out of
4 compliance with its Hook-Up Fee Tariff, and in addition to the suspension of the Company's
5 ability to collect those fees, the Commission ordered the Company to repay \$40,800 in
6 misspent fees to the Hook-Up Fee fund.

7
8 **Q. Please further discuss the Hook-Up Fee issue.**

9 A. Mt. Tipton was authorized, in Decision No. 67162 dated August 10, 2004, to collect Off-Site
10 Hook-Up Fees and for the fees to be placed into a separate interest bearing fund, to be used
11 only to pay for capitalized Off-Site Facilities, or to repay loans obtained for installation of
12 Off-Site Facilities. In Decision No. 70837, the Commission found that the Company was not
13 in compliance with the approved Hook-Up Fee tariff and suspended it. This decision also
14 prohibited the Company from making any further expenditures using Hook-Up Fee funds,
15 and ordered Mt. Tipton to repay to the Hook-Up Fee fund the \$40,800 that was misspent.

16
17 **Q. How did Mt. Tipton misspend its Hook-Up Fees?**

18 A. Staff found that the Company was depositing the collected Hook-Up Fee funds into its
19 general account and spending the monies for expenses such as repairs, maintenance, plant
20 replacements, or for operational purposes. Because of the comingling of funds and the fact
21 that the Company was not collecting the proper amount, Staff was unable to determine the
22 exact amount that was misspent. Staff calculated that had the Company collected the fees at
23 the correct rate, it would have collected \$40,800 in Hook-Up Fees over the period in question
24 and that is the amount the Commission ordered be repaid.

25

1 **Q. What is Staff's recommendation related to Hook-Up Fees?**

2 A. As discussed above, Decision No. 70836 has three required uses for the proceeds of the sale
3 of the property. The number two requirement is that the Company reimburse the Hook-Up
4 Fee fund account. Staff recommends that this requirement remain in place. Further, until
5 the property discussed in Decision No. 70836 is sold, Staff recommends that the Company
6 deposit \$5,000 per year, or \$500 per month on average, from the recommended revenue
7 increase in these proceedings into the account established to repay the \$40,800 in misspent
8 Hook-Up Fees, until the full amount has been repaid.

9
10 **CONSUMER SERVICES**

11 **Q. Please provide a brief history of customer complaints received by the Commission**
12 **regarding Mt. Tipton.**

13 A. A review of Consumer Service records by Staff reveals the following complaints and/or
14 opinions filed from January 1, 2011 through April 15, 2014:

15
16 2011 – Zero Complaints

17 2012 – One Complaint – Disconnect-Non-Pay

18 2013 and 2014 – Zero Complaints

19
20 There were zero opinions filed regarding this rate case and all complaints have been resolved
21 and are closed.

22
23 **COMPLIANCE**

24 **Q. Please provide a summary of the compliance status of Mt. Tipton.**

25 A. A check of the Compliance database on February 24, 2014, indicates that there are currently
26 no delinquencies for Mt. Tipton.

1 **SUMMARY OF PROPOSED REVENUES**

2 **Q. Please summarize the Company's filing.**

3 A. The Company proposes a \$46,133, or 13.58 percent, revenue increase from \$339,594 to
4 \$385,727. The proposed revenue increase would produce an operating income of \$98,029 for
5 a 12.98 percent rate of return on an original cost rate base ("OCRB") of \$755,229. The
6 Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill
7 with a median usage of 2,364 gallons from \$29.46 to \$33.27, for an increase of \$3.81 or 12.95
8 percent.

9
10 **Q. Please summarize Staff's recommended revenue.**

11 A. Staff recommends a \$19,529, or 5.75 percent, revenue increase from \$339,594 to \$359,123.
12 Staff's recommended revenue increase would produce an operating income of \$72,403 for an
13 effective 14.40 percent rate of return on a Staff adjusted OCRB of \$502,801 as shown on
14 Schedule BAB-1. Staff's recommended rates would increase the typical residential 5/8 x 3/4-
15 inch meter bill with a median usage of 2,364 gallons from \$29.46 to \$30.21, for an increase of
16 \$.75 or 2.55 percent.

17
18 **Q. Is it unusual for Staff to recommend a rate of return of 14.40 percent?**

19 A. Yes. In this case, Staff is recommending the revenue requirement necessary to obtain a 1.20
20 debt service coverage ratio ("DSC"). In order to obtain a 1.20 DSC, a 14.40 percent rate of
21 return is required.

22
23 **Q. What test year did Mt. Tipton utilize in this filing?**

24 A. Mt. Tipton's test year is based on the twelve months ended June 30, 2013.
25

1 Q. Please summarize Staff's rate base and operating income adjustments for Mt. Tipton.

2 A. Staff's testimony discusses the following adjustments:

3
4 **Rate Base Adjustments**

5 Wells & Structures – This adjustment decreases rate base by a net \$59,283 to reflect the
6 reclassification of 2 pumps that were improperly included in this account, and the removal of
7 2 inactive wells, the Church or LDS Well and the Spring Well.

8
9 Power Generation Equipment – This adjustment increases rate base by a net \$27,400 to
10 reflect the 125KVA on-site generator that was removed from rate base when the Detrital
11 Well was retired but the generator has been relocated to the new Office Well and is available
12 for immediate use once the Company completes the installation.

13
14 Pumping Equipment – This adjustment increases rate base by a net \$5,034 to reflect the
15 reclassification of 2 pumps that were improperly included in the Wells & Structures account,
16 and a pump that was removed from service and is no longer used and useful.

17
18 Solution Chemical Feeders – This adjustment decreases rate base by a net \$53,075 to reflect
19 the fact that Mt. Tipton does not presently have any chemical feeders in use in the
20 Company's system.

21
22 Computers & Software – This adjustment decreases rate base by a net of \$1,321 to reflect the
23 annual licensing fees for the billing and accounting programs that were incorrectly recorded
24 as capitalized plant.

25

1 Accumulated Depreciation – This adjustment decreases rate base by \$171,184 to reflect the
2 impact of Staff's recalculation of accumulated depreciation based on Staff adjustments to rate
3 base.

4
5 **Operating Income Adjustments**

6 Purchased Power Expense – This adjustment decreases purchased power expenses by \$3,868
7 to reflect Staff's disallowance of pumping power costs related to excess non-account water
8 loss, over the maximum allowable loss of 10 percent.

9
10 Water Testing Expense – This adjustment increases water testing expense by \$350 to reflect
11 an appropriate cost level for the Monitoring Assistant Program ("MAP") and other water
12 testing (see Engineering Report).

13
14 Depreciation Expense – This adjustment increases depreciation expense by \$3,026 to reflect
15 Staff's calculation of depreciation expense using Staff's recommended depreciation rates and
16 Staff's recommended plant and Contributions in Aid of Construction ("CIAC") balances.

17
18 **RATE BASE**

19 *Fair Value Rate Base*

20 **Q. Did the Company prepare schedules showing the elements of Reconstruction Cost**
21 **New Rate Base?**

22 **A. No, the Company did not. The Company's filing treats the OCRB the same as the fair value**
23 **rate base.**

24

1 *Rate Base Summary*

2 **Q. Please summarize Staff's adjustments to Mt. Tipton's rate base shown on Schedules**
3 **BAB-3 and BAB-4.**

4 A. Staff's adjustments to Mt. Tipton's rate base resulted in a net decrease of \$252,428, from
5 \$755,229 to \$502,801, due to various adjustments as discussed in Staff's testimony and
6 supported by Schedules BAB-5 through BAB-9.

7
8 *Rate Base Adjustment No. 1 – Wells & Springs*

9 **Q. Did Staff reclassify any expenses in the Wells & Springs account?**

10 A. Yes. As shown on Schedules BAB-4 and BAB-5, Staff reclassified \$59,283 in costs that the
11 Company incorrectly included in NARUC account no. 307 Wells & Springs. The Company
12 improperly included 2 pumps and 2 inactive wells.

13
14 **Q. How did Staff identify these misclassified costs?**

15 A. As part of the audit of the Company's plant, Staff selected a sample of plant additions since
16 the last rate case from 2010 to June 2013 and requested the source documentation, such as
17 invoices, to support the plant costs. The Company provided these documents in response to
18 Staff Data Request BAB 1-5.

19
20 **Q. What is the definition of "source documentation"?**

21 A. Source documentation is an original record containing the details to substantiate a transaction
22 entered in an accounting system. For example, the source document for the purchase of a
23 pump would be the supplier's invoice.

24

1 **Q. What plant additions did Staff identify that required correction?**

2 A. As shown on Schedule BAB-5, Staff identified a 15 HP pump that was installed on or around
3 November 9, 2009, with a cost of \$5,034 that was part of well upgrades performed on the
4 Ironwood Well and a 40 HP pump that was installed on or around April 29, 2010, with a cost
5 of \$9,878 that was part of the drilling of the new Office Well.

6
7 **Q. Why is correct classification needed?**

8 A. Correct classification is needed because Staff is recommending various depreciation rates
9 ranging from 2.0 percent to 20.0 percent depending on the specific account. Reclassification
10 will help ensure that the depreciation expense will be calculated accurately in the future and
11 that the Company is receiving a fair and just rate of return.

12
13 **Q. What is the net impact to plant of the pump reclassifications?**

14 A. As shown on Schedules BAB-5 and BAB-7, Staff reclassified \$14,913 from the Wells &
15 Springs account to the Pumping Equipment account. These adjustments will result in a zero
16 net change to the plant in service balance.

17
18 **Q. Did Staff identify any inactive wells that were included in rate base for Mt. Tipton?**

19 A. Yes. As discussed in the Engineering Report on page 2, Mt. Tipton had 5 active wells during
20 the test year. On Schedule C-2a, the Company reported a balance of \$407,673 in the Wells &
21 Springs account. Staff determined that this included 2 wells, the Church or LDS Well and the
22 Spring Well, that are no longer active.

23

1 **Q. Why is the Church or LDS Well no longer active?**

2 A. This well is located on State land that was leased by the Company. In 2010, the well casing
3 collapsed and when the lease expired in August of 2012 the Company decided not to renew
4 the lease or incur the cost of repairing the well. The well was subsequently capped.

5
6 **Q. Why is the Spring Well no longer active?**

7 A. In April of 2010, lightning destroyed the well. Due to the low yield prior to the lightning
8 strike, the Company made the decision to cap the well and disconnected it from its system.

9
10 **Q. Did Staff request documentation to support the original cost of these wells?**

11 A. Yes.

12
13 **Q. Did the Company provide invoices or other documentation to support the original
14 cost of the inactive wells?**

15 A. No, the Company provided documentation to support some costs of the wells but not all of
16 them.

17
18 **Q. What reason did the Company give for not providing the invoices or documentation?**

19 A. The Company indicated that its records only included a few original cost documents because
20 the plant is very old and not all of the records could be located.

21
22 **Q. Are plant costs required to be supported?**

23 A. Yes. Arizona Administrative Code R14-2-610 D.1 states, "Each utility shall keep general and
24 auxiliary accounting records reflecting the cost of its properties . . . and all other accounting
25 and statistical data necessary to give complete and authentic information as to its properties . .
26 ." (emphasis added).

1 **Q. Why are invoices needed?**

2 A. Invoices are needed to determine the original cost, if the amount reported on the invoice is
3 the same amount that was added to the plant account total, and if the addition to the plant
4 accounts is accurate.

5
6 **Q. What is the original cost of the Church or LDS Well?**

7 A. As shown on Schedule BAB-5 and in Table 5 on page 12 of the Engineering Report, Staff
8 calculated that the original cost of this well was \$29,012; therefore, Staff has removed this
9 amount from rate base.

10

11 **Q. What is the original cost of the Spring Well?**

12 A. As shown on Schedule BAB-5 and in Table 5 on page 12 of the Engineering Report, Staff
13 calculated that the original cost of this well was \$15,358; therefore, Staff has removed this
14 amount from rate base.

15

16 **Q. Are there any other inactive wells?**

17 A. Yes. As discussed in Staff's Engineering Report, the Detrital Well and Office Well (DWR
18 No. 55-606511) are also inactive.

19

20 **Q. Why is Staff not recommending an adjustment for these wells?**

21 A. An adjustment to rate base for the Detrital Well and Office Well (DWR No. 55-606511) was
22 already recorded by the Company to remove the original costs and accumulated depreciation
23 reserve balances from rate base. Staff is adopting these adjustments.

24

1 **Q. What is Staff's recommendation related to the Wells & Springs account?**

2 A. Staff recommends reducing plant in service by a net amount of \$59,283 for adjustments made
3 to Wells & Springs (account no. 307) as shown on Schedules BAB-4 and BAB-5.
4

5 *Rate Base Adjustment No. 2 – Power Generation Equipment*

6 **Q. Did Staff reclassify any expenses in the Power Generation Equipment?**

7 A. Yes. As shown on Schedules BAB-4 and BAB-6, Staff reclassified \$27,400 in expenses for a
8 125KVA on-site generator that the Company removed from rate base when it closed the
9 Detrital Well. The generator was relocated to the Office Well site and is available for
10 immediate use upon completion of the installation to Power Generation Equipment (account
11 no. 310).
12

13 **Q. What is the current status of the generator?**

14 A. When the Company retired the Detrital Well it relocated the generator from this well site to
15 the Office Well site. It is currently not installed because the Company stated it does not have
16 enough money to pay for the rest of the installation expenses but it is available for immediate
17 use once the Company has the rest of the necessary funds.
18

19 **Q. Why is Staff recommending that the generator be included in rate base?**

20 A: To date, the Company has paid \$1,478 of the \$3,736 it estimates it will cost to complete the
21 installation. Since this is the primary producing well for the Company, the necessary
22 equipment is in place, and about a third of the costs have already been incurred, Staff
23 recommends that the Company finish the installation using money from the Staff
24 recommended rate increase.
25

1 **Q. What is Staff's recommendation related to the Power Generation Equipment account?**

2 A. Since the generator is available for immediate use upon completion of installation, Staff
3 recommends increasing plant in service by \$27,400 and the Power Generation Equipment
4 account as shown on Schedules BAB-4 and BAB-6.

5

6 *Rate Base Adjustment No. 3 – Pumping Equipment*

7 **Q. Did Staff reclassify any expenses in the Pumping Equipment account?**

8 A. Yes. As shown on Schedules BAB-4 and BAB-7, Staff identified 2 pumps for a total of
9 \$14,913 that the Company incorrectly included in the Wells & Springs account that should
10 have been recorded as Pumping Equipment (account no. 311). Staff also identified a pump
11 that had been replaced without removing the old one from rate base in the amount of \$9,878.

12

13 **Q. Were there any recorded plant additions that required correction?**

14 A. Yes. As shown on Schedule BAB-7, Staff identified a 15 HP pump that was installed on or
15 around November 9, 2009, with a cost of \$5,034 that was part of well upgrades performed on
16 the Ironwood Well and a 40 HP pump that was installed on or around April 29, 2010, with a
17 cost of \$9,878 that was part of the drilling of the new Office Well. These 2 pumps were
18 originally recorded as additions to the Wells & Springs account.

19

20 **Q. What is the net impact to plant of the pump reclassifications?**

21 A. As shown on Schedules BAB-5 and BAB-7, Staff reclassified \$14,913 from the Wells &
22 Springs account to the Pumping Equipment account. These adjustments will result in a zero
23 net change to the plant in service balance.

24

1 **Q. What equipment does Staff recommended removing from rate base because it is not**
2 **used and useful?**

3 A. Staff identified a 40 HP pump that cost \$9,878 that had been removed from service on or
4 around May 18, 2012, but was still included in rate base. Therefore, Staff has determined that
5 because it is not used and useful, it should be removed from rate base.

6

7 **Q. What is Staff's recommendation related to the Pumping Equipment account?**

8 A. Staff recommends increasing plant in service by a net amount of \$5,034 for adjustments made
9 to Pumping Equipment (account no. 311) as shown on Schedules BAB-4 and BAB-7.

10

11 *Rate Base Adjustment No. 4 – Solution Chemical Feeders*

12 **Q. Did Staff reclassify any investments recorded in the Solution Chemical Feeders**
13 **account?**

14 A. Yes. As shown on Schedules BAB-4 and BAB-8a, Staff removed \$53,075 from rate base that
15 the Company incorrectly included as plant in the Solution Chemical Feeders (account no.
16 320.2) when Staff determined from the site visit that the Company did not have any chemical
17 feeders.

18

19 **Q. Why is Staff recommending the removal of \$53,075 for Chemical Feeders from rate**
20 **base?**

21 A. During the site visit conducted by Staff witness Dorothy Hains on February 11 and 12, 2014,
22 it was determined that Mt. Tipton did not have any water treatment equipment installed.
23 Specifically the Company does not have any chemical feeders. However, the Company
24 recorded \$53,075 in this account. Company officials confirmed that there are no chemical
25 feeders installed in the system and that this must have been an asset left on the books from
26 the 2001 purchase of Dolan Springs.

1 **Q. What is Staff's recommendation related to the Solution Chemical Feeders account?**

2 A. Staff recommends reducing plant in service by a net amount of \$53,075 for adjustments made
3 to Solution Chemical Feeders (account no. 320.2) as shown on Schedules BAB-4 and BAB-
4 8a.

5

6 *Rate Base Adjustment No. 5 – Computers & Software*

7 **Q. Did Staff reclassify any expenses in the Computers & Software account?**

8 A. Yes. As shown on Schedules BAB-4 and BAB-8b, Staff reclassified \$1,321 in expenses that
9 the Company incorrectly included as Computers & Software (account no. 340.1). The
10 Company, in its application, included the expenses for the annual license fees for its
11 accounting and billing software programs in the Computers & Software account, rather than
12 being recorded as an expense in account no. 621. Staff has adopted the Company's reported
13 Office Supplies and Expense of \$29,286 which corrects for this error as a pro-forma
14 adjustment.

15

16 **Q. Why are annual licensing fees expenses instead of plant additions?**

17 A. Software annual licensing fees should be recorded as expenses rather than plant additions
18 because they only allow the Company to use the software and be eligible for tech support for
19 one additional year. They do not significantly alter or change the fundamental program that
20 the Company has been using.

21

22 **Q. What is Staff's recommendation related to the Computers & Software account?**

23 A. Staff recommends reducing plant in service by a net amount of \$1,321 for adjustments made
24 to Computers & Software (account no. 340.1) as shown on Schedules BAB-4 and BAB-8b.

25

1 *Rate Base Adjustment No. 6 – Accumulated Depreciation*

2 **Q. Please state the Company's filed test year balance of Accumulated Depreciation.**

3 A. The Company filed Schedule B-1 shows a balance of \$1,147,676 for accumulated
4 depreciation.

5
6 **Q. Did Staff calculate the Company's accumulated depreciation?**

7 A. Yes. As shown on Schedule BAB-9, Staff calculated the Company's accumulated depreciation
8 including corresponding adjustments for rate base adjustments Nos. 1, 3, and 4.

9
10 **Q. Please state Staff's recommended adjustment to the Company filed balance of
11 accumulated depreciation.**

12 A. As shown on Schedule BAB-9, Rate Base Adjustment No. 6 increases accumulated
13 depreciation by \$171,184, to correctly restate the Company's filed accumulated depreciation.

14
15 **Q. What is Staff recommending for accumulated depreciation?**

16 A. Staff recommends accumulated depreciation of \$1,318,860 in this proceeding.

17
18 **OPERATING INCOME**

19 *Operating Income Summary*

20 **Q. What are the results of Staff's analysis of test year revenues, expenses and operating
21 income?**

22 A. As shown on Schedules BAB-10 and BAB-11, Staff's analysis resulted in test year revenues of
23 \$339,594, expenses of \$286,378, and an operating income of \$53,216.

24

1 *Operating Income Adjustment No. 1 – Purchased Power*

2 **Q. What is the Company's reported Purchased Power expense?**

3 A. The Company reports \$22,461 of purchased power expense.

4
5 **Q. Did the Company provide adequate support for its reported purchased power**
6 **expense?**

7 A. Yes.

8
9 **Q. Why is Staff proposing an adjustment to purchased power expense?**

10 A. Staff's recommended adjustment to purchased power expense is intended to account for the
11 Company's water loss in excess of the maximum allowable non-account water loss of 10
12 percent. As fully discussed on page 7 of the Engineering Report presented by Staff witness
13 Dorothy Hains, Staff has determined that the Company's water loss was approximately 27
14 percent at the end of the test year.

15
16 **Q. Did the Company incur costs associated with excess water loss?**

17 A. Yes. Primarily, the Company incurs pumping power costs for its pumped water, including
18 excess water loss. Also, labor costs could be incurred for managing excess water loss. Staff
19 finds that it is inappropriate for the Commission to allow the Company to recover such costs
20 from the ratepayers.

21
22 **Q. Please explain Staff's adjustment to purchased power expense.**

23 A. Staff's adjustment to purchased power expense is calculated based on water loss in excess of
24 the maximum allowable non-account water loss of 10 percent. As demonstrated on page 7 of
25 the Engineering Report and Schedule BAB-12, the Company's test year water loss was 27.22
26 percent of which 17.22 percent is in excess of maximum allowable non-account water loss.

1 Staff's Operating Income Adjustment No. 1 disallows 17.22 percent of test year purchased
2 power expense.

3
4 **Q. What is Staff's recommendation related to Purchased Power?**

5 A. Staff recommends decreasing purchased power expense by \$3,868 as shown on Schedule
6 BAB-12.

7
8 *Operating Income Adjustment No. 2 – Water Testing*

9 **Q. What amount for water testing did the Company propose for the test year ending June**
10 **30, 2013?**

11 A. The Company is proposing \$3,956 in water testing expenses as shown on Schedule C-1.

12
13 **Q. Did Staff calculate a different amount for water testing expenses?**

14 A. Yes, as discussed in the Staff Engineering Report in Section J on page 8, Staff calculated
15 water testing expenses to be \$4,306; an increase of \$350, from the Company reported \$3,956.

16
17 **Q. What is Staff's recommendation related to Water Testing?**

18 A. Staff recommends increasing water testing expense by \$350 as shown on Schedules BAB-11
19 and BAB-13.

20
21 *Operating Income Adjustment No. 3 – Depreciation Expense*

22 **Q. What is Mt. Tipton proposing for depreciation expense?**

23 A. Mt. Tipton is proposing depreciation expense of \$45,005.

24

1 **Q. What adjustment did Staff make to depreciation expense?**

2 A. Staff adjusted depreciation expense to reflect Staff's calculation of depreciation expense using
3 Staff's recommended depreciation rates, plant balances, and CIAC balances. Staff's
4 calculation is shown on Schedule BAB-14.

5
6 **Q. What is Staff's recommendation related to Depreciation Expense?**

7 A. Staff recommends increasing depreciation expense by \$3,026, as shown on Schedules BAB-11
8 and BAB-14.

9
10 **REVENUE REQUIREMENT**

11 **Q. Did Staff use the rate base/rate of return methodology to determine the Company's**
12 **revenue requirement?**

13 A. No. Staff was unable to derive the revenue requirement by applying a rate of return on rate
14 base. In determining the revenue requirement, Staff endeavored to provide the Company
15 sufficient funds to meet debt service requirements and operating expenses, and to manage
16 contingencies. Staff's recommended revenue is the result of obtaining a minimum of 1.20
17 DSC. Staff believes that its recommended cash flow provides ample funds to meet the
18 Company's operating needs.

19
20 **RATE DESIGN**

21 **Q. Has Staff prepared a schedule summarizing the present, Company proposed, and**
22 **Staff recommended rates and service charges?**

23 A. Yes. Schedule BAB-18 provides a summary of the Company's present, Company's proposed,
24 and Staff's recommended rates.

25

1 **Q. Please summarize the Company's proposed rate design.**

2 A. Customer class is distinguished by meter size. The monthly minimum charges vary by meter
3 size and include no gallons. The commodity rates are based on an inverted three-tier rate
4 design. The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch
5 meter bill with a median usage of 2,364 gallons from \$29.46 to \$33.27, for an increase of
6 \$3.81, or 12.95 percent, as shown on Schedule BAB-19.

7
8 **Q. Please summarize Staff's recommended rate design.**

9 A. Customer class is distinguished by meter size. The monthly minimum charges vary by meter
10 size and include no gallons. The commodity rates are based on an inverted three-tier rate
11 design. Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch
12 meter bill with a median usage of 2,364 gallons from \$29.46 to \$30.21, for an increase of \$.75
13 or 2.55 percent, as shown on Schedule BAB-19.

14
15 **Q. Did the Company propose any changes to its Meter and Service Line Charges?**

16 A. No, and Staff does not recommend any changes.

17
18 *Service Charges*

19 **Q. Did the Company propose any changes to the service charges?**

20 A. Yes. The Company proposes to increase the Establishment charge from \$25 to \$30,
21 eliminate the Establishment (After Hours) and Reconnection (After Hours) charges, increase
22 the After Hours Service Charge from \$0 to \$50, and increase the Monthly Service Charge for
23 Fire Sprinkler service from 2 percent or a minimum of \$10 to 2 percent or a minimum of \$11.

24
25 **Q. Does Staff agree with the Company-proposed Establishment charge?**

26 A. Yes. The proposed charge is reasonable and customary.

1 **Q: Does Staff agree with the Company-proposed Fire Sprinkler charge?**

2 A. No. Staff recommends no change to the current charges.

3
4 **Q. Does Staff recommend the elimination of the \$40 Establishment (After Hours)**
5 **Charge, the \$40 Reconnection (After Hours) Charge and to add a \$50 After Hours**
6 **Charge?**

7 A. Yes, Staff recommends that the Establishment (After Hours) Charge and the Reconnection
8 (After Hours) Charge be eliminated and that an After-Hours charge be added. Staff agrees
9 that an additional fee for service provided after normal business hours is appropriate when
10 such service is at the customer's request. Such a tariff compensates the utility for additional
11 expenses incurred from providing after-hours service, but the amount that the Company
12 proposed is higher than other companies of a similar size and location.

13
14 **Q. Does this conclude Staff's Direct Testimony?**

15 A. Yes, it does.

Mount Tipton Water Company, Inc.
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TESTIMONY OF BRITON BAXTER

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REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	\$755,229	\$502,801
2	Adjusted Operating Income (Loss)	\$52,725	\$53,217
3	Current Rate of Return (L2 / L1)	6.98%	10.58%
4	Required Rate of Return	12.98%	14.40%
5	Required Operating Income (L4 * L1)	\$98,029	\$72,403
6	Operating Income Deficiency (L5 - L2)	\$45,304	\$19,187
7	Gross Revenue Conversion Factor/Property Tax Factor	101.83%	101.78%
8	Increase (Decrease) In Gross Revenue (L7 * L6)	\$46,133	\$19,529
9	Adjusted Test Year Revenue	\$339,594	\$339,594
10	Proposed Annual Revenue (L8 + L9)	\$385,727	\$359,123
11	Required Increase/(Decrease in Revenue) (%) (L8/L9)	13.58%	5.75%

References:

Column [A]: Company Schedules A-1

Column [B]: Staff Schedules BAB-2, BAB-3, BAB-10 & BAB-11

Mount Tipton Water Company, Inc.
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Schedule BAB-2

GROSS REVENUE CONVERSION FACTOR
--

LINE
NO.

DESCRIPTION

Calculation of Gross Revenue Conversion Factor:

1	Revenue	100.00%
2	Property Tax Rate (Line 23)	1.75%
3	Arizona Taxable Income	<u>98.25%</u>
4	Arizona Income Tax	0.00%
5	Federal Taxable Income	<u>98.25%</u>
6	Federal Income Tax	0.00%
7	Operating Income	<u>98.25%</u>
8	Revenue Conversion Factor (L1 / L7)	<u><u>101.78%</u></u>

RATE BASE - ORIGINAL COST				
LINE NO.	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED	
1	Plant in Service	\$1,937,095	(\$81,244)	\$1,855,851
2	Less: Accumulated Depreciation	1,147,676	171,184	1,318,860
3	Net Plant in Service	\$789,419	(\$252,428)	\$536,991
<i>LESS:</i>				
4	Advances in Aid of Construction (AIAC)	\$16,029	\$0	\$16,029
5	Service Line and Meter Advances	\$0	\$0	\$0
6	Contributions in Aid of Construction (CIAC)	\$347,002	\$0	\$347,002
7	Less: Accumulated Amortization	333,126	0	333,126
8	Net CIAC	\$13,876	\$0	\$13,876
9	Total Advances and Contributions	\$29,905	\$0	\$29,905
10	Customer Deposits	\$4,285	\$0	\$4,285
11	Accumulated Deferred Income Taxes	\$0	\$0	\$0
<i>ADD: Working Capital</i>				
12	Prepayments	\$0	\$0	\$0
13	Inventory	\$0	\$0	\$0
14	Total Rate Base	\$755,229	(\$252,428)	\$502,801

References:

Column [A], Company Schedule B-2

Column [B]: Schedule BAB-4

Column [C]: Column [A] + Column [B]

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	ACCT.	[A] COMPANY AS FILED	[B]	[C]	[D]	[E]	[F]	[G]	[H]
			Adj.No.1 Wells & Springs	Adj.No. 2 Power Generation Equipment	Adj.No. 3 Pumping Equipment	Adj.No. 4 Solution Chemical Feeders	Adj.No. 5 Computers & Software	Adj.No. 6 Accumulated Depreciation	STAFF AS ADJUSTED
1	No. Plant Description								
2	301 Organization Cost	\$17,450	\$0	\$0	\$0	\$0	\$0	\$0	\$17,450
3	302 Franchises	500	0	0	0	0	0	0	500
4	303 Land and Land Rights	9,842	0	0	0	0	0	0	9,842
5	304 Structures and Improvements	70,621	0	0	0	0	0	0	70,621
6	305 Collecting and Impounding Reservoirs	0	0	0	0	0	0	0	0
7	307 Wells and Springs	407,673	(59,283)	0	0	0	0	0	348,390
8	309 Supply Mains	0	0	0	0	0	0	0	0
9	310 Power Generation Equipment	0	0	27,400	0	0	0	0	27,400
10	311 Pumping Equipment	113,628	0	0	5,034	0	0	0	118,662
11	320 Water Treatment Equipment	0	0	0	0	0	0	0	0
12	320.1 Water Treatment Plants	0	0	0	0	0	0	0	0
13	320.2 Solution Chemical Feeders	53,075	0	0	0	(53,075)	0	0	0
14	330 Distribution Reservoirs and Standpipes	0	0	0	0	0	0	0	0
15	330.1 Storage Tanks	223,341	0	0	0	0	0	0	223,341
16	330.2 Pressure Tanks	0	0	0	0	0	0	0	0
17	331 Transmission and Distribution Mains	799,500	0	0	0	0	0	0	799,500
18	333 Services	59,750	0	0	0	0	0	0	59,750
19	334 Meters and Meter Installations	130,798	0	0	0	0	0	0	130,798
20	335 Hydrants	1,230	0	0	0	0	0	0	1,230
21	336 Backflow Prevention Devices	0	0	0	0	0	0	0	0
22	339 Other Plant and Miscellaneous Equipment	1,880	0	0	0	0	0	0	1,880
23	340 Office Furniture and Equipment	18,094	0	0	0	0	0	0	18,094
24	340.1 Computers and Software	7,007	0	0	0	0	(1,321)	0	5,686
25	341 Transportation Equipment	11,592	0	0	0	0	0	0	11,592
26	343 Tools, Shop, and Garage Equipment	1,274	0	0	0	0	0	0	1,274
27	344 Laboratory Equipment	0	0	0	0	0	0	0	0
28	345 Power Operated Equipment	167	0	0	0	0	0	0	167
29	346 Communication Equipment	0	0	0	0	0	0	0	0
30	347 Miscellaneous Equipment	8,464	0	0	0	0	0	0	8,464
31	348 Other Tangible Equipment	1,208	0	0	0	0	0	0	1,208
32	Rounding	1	0	0	0	0	0	0	1
33	Total Plant in Service	\$1,937,095	(\$59,283)	\$27,400	\$5,034	(\$53,075)	(\$1,321)	\$0	\$1,855,851
34	Less: Accumulated Depreciation	1,147,676	0	0	0	0	0	171,184	1,318,860
35	Net Plant in Service	\$789,419	(\$59,283)	\$27,400	\$5,034	(\$53,075)	(\$1,321)	(\$171,184)	\$536,991
36									
37	<u>LESS:</u>								
38	Advances in Aid of Construction (AIAC)	\$16,029	\$0	\$0	\$0	\$0	\$0	\$0	\$16,029
39	Meter Deposits - Service Line & Meter Advances	0	0	0	0	0	0	0	0
40									
41	Contributions in Aid of Construction (CIAC)	\$347,002							\$347,002
42	Less: Accumulated Amortization of CIAC	333,126							333,126
43	Net CIAC	\$13,876	\$0	\$0	\$0	\$0	\$0	\$0	\$13,876
44									
45	Total Advances and Net Contributions	\$29,905	\$0	\$0	\$0	\$0	\$0	\$0	\$29,905
46									
47	Customer Deposits	\$4,285	\$0	\$0	\$0	\$0	\$0	\$0	\$4,285
48	Accumulated Deferred Taxes	0	0	0	0	0	0	0	0
49									
50	<u>ADD: Working Capital</u>								
51	Prepayments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
52		0	0	0	0	0	0	0	0
53	Total Rate Base	\$755,229	(\$59,283)	\$27,400	\$5,034	(\$53,075)	(\$1,321)	(\$171,184)	\$502,801

RATE BASE ADJUSTMENT NO. 1 - WELLS & SPRINGS

LINE NO.	Act. No.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	307	Wells & Springs	\$407,673	(\$59,283)	\$348,390
2					
3					
4					
5					
6	MISCLASSIFIED				
7	Act. No.	Description	2009	2010	Total
8	307	Wells & Springs	(\$5,034)	(\$9,878)	(\$14,913)
9	311	Pumping Equipment	5,034	9,878	\$14,913
10					\$0
11					
12					
13					
14	NOT USED AND USEFUL				
15		Church or LDS Well	(\$29,012)		
16		Spring Well	(15,358)	(\$44,370)	

References:

Column [A]: Company Schedules C-2a & E-5

Column [B]: Testimony, BAB, Company Data Request Responses BAB 1.5, DH 5.2 & DH 5.3

Column [C]: Column [A] + Column [B]

Mount Tipton Water Company, Inc.
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Schedule BAB-6

RATE BASE ADJUSTMENT NO. 2 - POWER GENERATION EQUIPMENT

LINE NO.	Act. No.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1		310 Power Generation Equipment	\$0	\$27,400	\$27,400

References:

- Column [A]: Company Schedules C-2a & E-5
- Column [B]: Testimony, BAB, Company Data Request Responses BAB 1.5
- Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 3 - PUMPING EQUIPMENT

LINE NO.	Act. No.	Description	[A]	[B]	[C]
			COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1		311 Pumping Equipment	\$113,628	\$5,034	\$118,662
2					
3					
4					
5					
6	MISCLASSIFIED				
	Act. No.	Description	2009	2010	Total
7					
8		307 Wells & Springs	(\$5,034)	(\$9,878)	(\$14,913)
9		311 Pumping Equipment	5,034	9,878	\$14,913
10					\$0
11					
12					
13					
14	NOT USED AND USEFUL				
15		Retired 40 horsepower pump	(\$9,878)		(\$9,878)

References:

- Column [A]: Company Schedules C-2a & E-5
- Column [B]: Testimony, BAB, Company Data Request Responses BAB 1.5
- Column [C]: Column [A] + Column [B]

Mount Tipton Water Company, Inc.
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Schedule BAB-8a

RATE BASE ADJUSTMENT NO. 4 - SOLUTION CHEMICAL FEEDERS

LINE NO.	Act. No.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	320.2	Solution Chemical Feeders	\$53,075	(\$53,075)	\$0

References:

Column [A]: Company Schedules C-2a & E-5

Column [B]: Testimony, BAB, Engineering Staff Report Page 11, Section III C.

Column [C]: Column [A] + Column [B]

Mount Tipton Water Company, Inc.
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Schedule BAB-8b

RATE BASE ADJUSTMENT NO. 5 - COMPUTERS & SOFTWARE

LINE NO.	Act. No.	Description	[A]	[B]	[C]
			COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	340.1	Computers & Software	\$7,007	(\$1,321)	\$5,686

References:

Column [A]: Company Schedules C-2, C-2a & E-5

Column [B]: Testimony, BAB, Company Data Request Responses BAB 1.5

Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 6 - ACCUMULATED DEPRECIATION

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Accumulated Deprecation	\$1,147,676	\$171,184	\$1,318,860
2				
3	<u>Calculation of Accumulated Deprecation</u>			
4				
5	Balance per Decision No. 72001			\$1,212,673
6	Depreciation Expense - 2010		\$66,959	
7	Depreciation Expense - 2011		60,101	
8	Depreciation Expense - 2012		57,437	
9	Depreciation Expense - January 1 through June 30, 2013		29,013	\$213,510
10				
11	Plant Retirement - Church Well		(29,012)	
12	Plant Retirement - Spring Well		(15,358)	
13	Plant Retirement - Solution Chemical Feeders		(53,075)	
14	Plant Retirement - 40 horsepower pump		(9,878)	(\$107,323)
15				
16	Total Accumulated Depreciation			<u>\$1,318,860</u>

References:

Column [A]: Company Schedule B-2

Column [B]: Testimony, BAB, Company Data Request Responses BAB 1.5, DH 5.2 & DH 5.3, Decision No. 72001

Column [C]: Column [A] + Column [B]

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A]	[B]	[C]	[D]	[E]
		COMPANY TEST YEAR AS FILED	STAFF TEST YEAR ADJUSTMENTS	STAFF TEST YEAR AS ADJUSTED	STAFF PROPOSED ADJ CHANGES	STAFF RECOMMENDED
REVENUES:						
1	Metered Water Sales	\$312,811		\$312,811	\$19,529	\$332,340
2	Coin Revenue	16,341		16,341		16,341
3	Service Line and Meter Installation Charges	4,450		4,450		4,450
4	Other Operating Revenues	5,992		5,992		5,992
5	Total Revenues	\$339,594	\$0	\$339,594	\$19,529	\$359,123
EXPENSES:						
8	Salaries and Wages	\$103,268	\$0	\$103,268	\$0	\$103,268
9	Purchased Water	0	0	0	0	0
11	Purchased Power	22,461	(3,868) 1	18,593	0	18,593
12	Chemicals	0	0	0	0	0
13	Repairs and Maintenance	15,086	0	15,086	0	15,086
14	Office Supplies & Expense	29,286	0	29,286	0	29,286
15	Outside Services	8,030	0	8,030	0	8,030
16	Water Testing	3,956	350 2	4,306	0	4,306
17	Rental Expense	500	0	500	0	500
18	Transportation Expenses	9,336	0	9,336	0	9,336
19	Insurance - General Liability	10,691	0	10,691	0	10,691
22	Insurance - Health and Life	0	0	0	0	0
24	Rate Case Expense	7,000	0	7,000	0	7,000
25	Miscellaneous Expense	3,082	0	3,082	0	3,082
26	Depreciation Expense	45,005	3,026 3	48,031	0	48,031
27	Taxes Other Than Income	10,565	0	10,565	0	10,565
28	Property Taxes	18,279	0	18,279	(127)	18,152
29	Income Taxes	0	0	0	0	0
30	Customer Security Deposit Interest	324	0	324	0	324
33	Total Operating Expenses	\$286,869	(\$491)	\$286,378	(\$127)	\$286,250
35	Operating Income (Loss)	\$52,725	\$491	\$53,216	\$19,656	\$72,872

References:

- Column [A]: Company Schedule C-1
- Column [B]: Schedules BAB-12, BAB-13 and BAB-14
- Column [C]: Column [A] + Column [B]
- Column [D]: Schedule BAB-15
- Column [E]: Column [C] + Column [D]

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 Purchased Power Ref: Sch BAB-12	[C] ADJ #2 Water Testing Ref: Sch BAB-13	[D] ADJ #3 Depreciation Expense Ref: Sch BAB-14	[E] STAFF ADJUSTED
<u>REVENUES:</u>						
1	Metered Water Sales	\$312,811	\$0	\$0	\$0	\$312,811
2	Coin Revenue	16,341	0	0	0	16,341
3	Service Line and Meter Installation Charges	4,450				4,450
4	Other Water Revenue	5,992	0	0	0	5,992
5	Total Revenues	\$339,594	\$0	\$0	\$0	\$339,594
6						
<u>OPERATING EXPENSES:</u>						
8	Salaries and Wages	\$103,268	\$0	\$0	\$0	\$103,268
9	Purchased Water	0	0	0	0	0
10	Purchased Power	22,461	(3,868)	0	0	18,593
11	Chemicals	0	0	0	0	0
12	Repairs and Maintenance	15,086	0	0	0	15,086
13	Office Supplies & Expense	29,286	0	0	0	29,286
14	Outside Services	8,030	0	0	0	8,030
15	Water Testing	3,956	0	350	0	4,306
16	Rental Expense	500	0	0	0	500
17	Transportation Expenses	9,336	0	0	0	9,336
18	Insurance - General Liability	10,691	0	0	0	10,691
19	Insurance - Health and Life	0	0	0	0	0
20	Rate Case Expense	7,000	0	0	0	7,000
21	Miscellaneous Expense	3,082	0	0	0	3,082
22	Depreciation Expense	45,005	0	0	3,026	48,031
23	Taxes Other Than Income	10,565	0	0	0	10,565
24	Property Taxes	18,279	0	0	0	18,279
25	Income Taxes	0	0	0	0	0
26	Customer Security Deposit Interest	324	0	0	0	324
27			0	0		
28	Total Operating Expenses	\$286,869	(\$3,868)	\$350	\$3,026	\$286,377
29						
30	Operating Income (Loss)	\$52,725	\$3,868	(\$350)	(\$3,026)	\$53,217

OPERATING INCOME ADJUSTMENT NO. 1 - PURCHASED POWER

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS (Col C - Col A)	STAFF AS ADJUSTED
1	Purchased Power	\$22,461	(\$3,868)	\$18,593
2				
3				
4				
5	Calculation of cost of Purchased Power related to Excess Water Loss			
6				
7	<u>Description</u>	<u>Gallons</u>	<u>Amount</u>	
8	Water Pumped	47,768,000		
9	Water Sold	<u>34,766,000</u>		
10	10% of Water Pumped (L8 * 10%)	4,776,800		
11	Water Sold Plus 10% (L9 + L10)	<u>39,542,800</u>		
12	Excess Water Loss (L8 - L11)	8,225,200		
13	Percentage of Excess Water Loss (L12/L8)	17.22%		
14	Purchased Power Expense		<u>\$22,461</u>	
15	Purchased Power related to Excess Water Loss (L13 * L14)		<u>\$3,868</u>	

References:

Column [A]: Company Schedule C-1

Column [B]: Testimony, BAB; Engineering Staff Report Table 2A, Page 6

Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 2 - WATER TESTING

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS (Col C - Col A)	STAFF AS ADJUSTED
1	Water testing expense	\$3,956	\$350	\$4,306

References:

Column [A]: Company Schedule C-1

Column [B]: Testimony, BAB, Staff Engineering Report, Section J

Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 3 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

LINE NO.	Acct No.	DESCRIPTION	[A]	[B]	[C]	[D]	[E]
			PLANT In SERVICE Per Staff	NonDepreciable or Fully Depreciated PLANT	DEPRECIABLE PLANT (Col A - Col B)	DEPRECIATION RATE	DEPRECIATION EXPENSE (Col C x Col D)
1	301	Organization Cost	\$17,450	(\$17,450)	\$0	0.00%	\$0
2	302	Franchises	500	(500)	0	0.00%	0
3	303	Land and Land Rights	9,842	(9,842)	0	0.00%	0
4	304	Structures and Improvements	70,621	0	70,621	3.33%	2,352
5	307	Wells and Springs	348,390	0	348,390	2.50%	8,710
6	310	Power Generation Equipment	27,400	0	27,400	5.00%	1,370
7	311	Pumping Equipment	118,662	0	118,662	12.50%	14,833
8	320	Water Treatment Equipment	0	0	0		
9	320.1	Water Treatment Plants	0	0	0	3.33%	0
10	320.2	Solution Chemical Feeders	0	0	0	20.00%	0
11	330	Distribution Reservoirs and Standpipes	0	0	0		
12	330.1	Storage Tanks	223,341	0	223,341	2.22%	4,958
13	330.2	Pressure Tanks	0	0	0	5.00%	0
14	331	Transmission and Distribution Mains	799,500	0	799,500	2.00%	15,990
15	333	Services	59,750	0	59,750	3.33%	1,990
16	334	Meters and Meter Installations	130,798	69,595	61,203	8.33%	5,098
17	335	Hydrants	1,230	0	1,230	2.00%	25
18	339	Other Plant and Miscellaneous Equipment	1,880	0	1,880	6.67%	125
19	340	Office Furniture and Equipment	18,094	17,463	631	6.67%	42
20	340.1	Computers and Software	5,686	0	5,686	20.00%	1,137
21	341	Transportation Equipment	11,592	0	11,592	20.00%	2,318
22	343	Tools, Shop, and Garage Equipment	1,274	0	1,274	5.00%	64
23	344	Laboratory Equipment	0	0	0	10.00%	0
24	345	Power Operated Equipment	167	0	167	5.00%	8
25	347	Miscellaneous Equipment	8,464	0	8,464	10.00%	846
26	348	Other Tangible Equipment	1,208	0	1,208	10.00%	121
27		Total Plant	\$1,855,850	\$59,266	\$1,741,000		\$59,987
28							
29							
30		Composite Depreciation Rate (Depr Exp / Depreciable Plant):		3.45%			
31		CIAC:		\$347,002			
32		Amortization of CIAC (Line 33 x Line 34):		\$11,956			
33							
34		Depreciation Expense Before Amortization of CIAC:		\$59,987			
35		Less Amortization of CIAC:		11,956			
36		Test Year Depreciation Expense - Staff:		\$48,031			
37		Depreciation Expense - Company:		45,005			
38		Staff's Total Adjustment:		\$3,026			

References:

- Column [A]: Schedule BAB-4
- Column [B]: From Column [A]
- Column [C]: Column [A] - Column [B]
- Column [D]: Engineering Staff Report Figure 5
- Column [E]: Column [C] x Column [D]

OPERATING INCOME ADJUSTMENT - PROPERTY TAXES

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	\$339,594	\$339,594
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	\$679,188	\$679,188
4	Staff Recommended Revenue, Per Schedule BAB-1	339,594	359,123
5	Subtotal (Line 4 + Line 5)	\$1,018,782	\$1,038,311
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	\$339,594	\$346,104
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	\$679,188	\$692,207
10	Plus: 10% of CWIP -	-	-
11	Less: Net Book Value of Licensed Vehicles	\$0	\$0
12	Full Cash Value (Line 9 + Line 10 - Line 11)	\$679,188	\$692,207
13	Assessment Ratio	19.50%	19.00%
14	Assessment Value (Line 12 * Line 13)	\$132,442	\$131,519
15	Composite Property Tax Rate	13.80%	13.80%
			\$0
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$18,279	
17	Company Proposed Property Tax	18,279	
18	Staff Test Year Adjustment (Line 16-Line 17)	\$0	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$18,152
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		18,279
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		(127)
22	Increase to Property Tax Expense		(\$127)
23	Increase in Revenue Requirement		\$19,529
24	Increase to Property Tax per Dollar Increase in Revenue (Line 19/Line 20)		-0.65%

DELINQUENT PROPERTY TAX SURCHARGE CALCULATION

Delinquent Property Taxes dues as of 4/22/2014: **\$197,433**
Monthly Interest Rate: **1.33%**

Step 1 - Find the current tax bill for the delinquent property taxes

\$197,433 Total Amount of delinquent property taxes
115.96% Annual Interest Rate
\$228,943 Estimated Delinquent Property Tax balance as of 4/22/2015

Step 2 - Find the Equivalent Bills

Equivalent Bills				
[A]	[B]	[C]	[D]	[E]
Meter Size	NARUC Multiplier	Number of Customers	Repayment in 18 Months	Equivalent Bills [B] x [C] x [D]
5/8" x 3/4" Meter	1	657	18	11,826
3/4" Meter	1.5	0	18	-
1" Meter	2.5	1	18	45
1 1/2" Meter	5	1	18	90
2" Meter	8	2	18	288
3" Meter	15	0	18	-
4" Meter	25	1	18	450
6" Meter	50	0	18	-
		<u>662</u>		<u>12,699</u>

Step 3 - Find the Monthly Surcharge for the 5/8" x 3/4" Meter Size Customers

\$228,943 Delinquent Property Tax balance as of 4/22/2015
12,699 Divided by: Total Number of Equivalent Bills
\$18.03 Monthly Surcharge for 3/4" Customers

Step 4 - Find the Monthly Surcharge for the Remaining Meter Size Customers

Equivalent Bills			
[A]	[B]	[C]	[D]
Meter Size	NARUC Multiplier	Customers' Surcharge	Surcharge by Meter Size [B] x [C]
5/8" x 3/4" Meter	1	\$18.03	\$18.03
3/4" Meter	1.5	\$18.03	\$27.04
1" Meter	2.5	\$18.03	\$45.07
1 1/2" Meter	5	\$18.03	\$90.14
2" Meter	8	\$18.03	\$144.23
3" Meter	15	\$18.03	\$270.43
4" Meter	25	\$18.03	\$450.71
6" Meter	50	\$18.03	\$901.42

Step 5 - Find the annual revenue generated by the Monthly Surcharge

Equivalent Bills			
[A]	[B]	[C]	[D]
Meter Size	Number of Customers	Surcharge by Meter Size	Annual Revenue [B] x [C] x 12
5/8" x 3/4" Meter	657	\$18.03	\$142,136
3/4" Meter	0	\$27.04	0
1" Meter	2	\$45.07	1,082
1 1/2" Meter	1	\$90.14	1,082
2" Meter	2	\$144.23	3,461
3" Meter	0	\$270.43	0
4" Meter	0	\$450.71	0
6" Meter	0	\$901.42	0
	<u>662</u>		<u>\$147,761</u>

Step 6 - Find the Property Tax Conversion Factor

1.01781

Step 7 - Find the Incremental Income Tax Factor

1.01781 minus 1 = 0.01781

Step 8 - Find the Annual Property Tax Component of Surcharge Revenue

0.01781 Incremental Income Tax Factor (from Step 7)
\$147,761 Multiplied by: Annual Surcharge Revenue (from Step 5)
\$2,632 Annual Income Tax Component of the Annual Surcharge Revenue

FINANCIAL ANALYSIS

Selected Financial Data
Including Immediate Effects of the Proposed Delinquent Property Tax Surcharge

Line No.	[A] Staff Recommended Rates without Surcharge	[B] Adjustments	REF	[C] Staff Recommended Rates with Surcharge	
1	INCOME STATEMENT				
2	Operating Revenue				
3	Metered Water Revenue	\$332,340	\$0	\$332,340	
4	Coin Revenue	\$16,341	0	\$16,341	
5	Service Line and Meter Installation Charges	\$4,450	0	\$4,450	
6	Delinquent Property Tax Surcharge	0	147,761	A	\$147,761
7	Other Water Revenues	5,992	0	\$5,992	
8	Total Operating Rev:	\$359,123	\$147,761	\$506,883	
10	Operating Expenses				
11	Salaries and Wages	\$103,268	\$0	\$103,268	
12	Purchased Water	0	0	0	
13	Purchased Power	18,593	0	18,593	
14	Chemicals	0	0	0	
15	Repairs and Maintenance	15,086	0	15,086	
16	Office Supplies & Expense	29,286	0	29,286	
17	Outside Services	8,030	0	8,030	
18	Water Testing	4,306	0	4,306	
19	Rental Expense	500	0	500	
20	Transportation Expenses	9,336	0	9,336	
21	Insurance - General Liability	10,691	0	10,691	
22	Insurance - Health and Life	0	0	0	
23	Rate Case Expense	7,000	0	7,000	
24	Miscellaneous Expense	3,082	0	3,082	
25	Depreciation Expense	48,031	0	48,031	
26	Taxes Other Than Income	10,565	0	10,565	
27	Property Taxes	18,152	2,632	B	20,784
28	Income Taxes	0	0	0	
29	Customer Security Deposit Interest	324	0	324	
30	Total Operating Expense	\$286,250	\$2,632	\$288,882	
32	Operating Income	\$72,872	\$145,129	\$218,001	
36	Total Other Interest Expense				
34	Interest Income	\$0	\$0	\$0	
35	Interest Expense on Long-term debt	0	0	0	
38	Net Income	\$72,872	\$145,129	\$218,001	
40	Rate Base	\$502,801		\$502,801	
42	Rate of Return (Line 32 / Line 40)	14.49%		43.36%	
44	Operating Margin (Line 32 / Line 8)	20.29%		43.01%	
46	Delinquent Property Tax Repayment	\$0	\$147,761	C	\$147,761
48	Annual Debt Service Amount	\$100,615	\$0	\$100,615	
50	Cash Flow (L38 + L25 - L46 - L48)	\$20,288	(\$2,632)	\$17,656	
51	DSC [L25 + L28 + L32] ÷ [L46 + L48]	1.20		1.07	

References:

Column [A]: Schedule BAB-10 & BAB-3, Company Schedule A-1
Column [B]: Schedule, BAB-16; A - Step 1 and Step 5; B - See Step 8; C - See Step 5
Column [C]: Column [A] + Column [B]

RATE DESIGN

Monthly Usage Charge	Present	Company Proposed Rates	Staff Recommended Rates
Meter Size (All Classes):			
5/8 x 3/4 Inch	\$22.25	\$25.00	\$23.00
3/4 Inch	33.38	37.50	34.13
1 Inch	55.63	62.50	56.38
1 1/2 Inch	111.25	125.00	112.00
2 Inch	178.00	200.00	178.75
3 Inch	356.00	400.00	356.75
4 Inch	556.25	625.00	557.00
6 Inch	112.50	1,250.00	1,112.50
8 Inch	1,780.00	1,875.00	1,780.00

Commodity Charge - Per 1,000 Gallons			
All Meter Sizes			
First 4,000 gallons	\$3.05	N/A	N/A
4,001 to 9,000 gallons	4.60	N/A	N/A
Over 9,000 gallons	5.50	N/A	N/A
First 3,000 gallons	N/A	\$3.50	\$3.05
3,001 to 8,000 gallons	N/A	5.00	4.65
Over 8,000 gallons	N/A	6.35	6.18
5/8 x 3/4-Inch Meter			
First 3,000 gallons	N/A	\$3.50	3.05
3,001 to 8,000 gallons	N/A	5.00	4.65
Over 8,000 gallons	N/A	6.35	6.18
3/4-Inch Meter			
First 3,000 gallons	N/A	\$3.50	3.05
3,001 to 8,000 gallons	N/A	5.00	4.65
Over 8,000 gallons	N/A	6.35	6.18
1" Meter (All Classes)			
First 20,000 gallons	N/A	N/A	4.65
Over 20,000 gallons	N/A	N/A	6.27
1 1/2" Meter (All Classes)			
First 50,000 gallons	N/A	N/A	4.65
Over 50,000 gallons	N/A	N/A	6.27
2" Meter (All Classes)			
First 80,000 gallons	N/A	N/A	4.65
Over 80,000 gallons	N/A	N/A	6.27
3" Meter (All Classes)			
First 150,000 gallons	N/A	N/A	4.65
Over 150,000 gallons	N/A	N/A	6.27
4" Meter (All Classes)			
First 300,000 gallons	N/A	N/A	4.65
Over 300,000 gallons	N/A	N/A	6.27
6" Meter (All Classes)			
First 500,000 gallons	N/A	N/A	4.65
Over 500,000 gallons	N/A	N/A	6.27
8" Meter (All Classes)			
First 600,000 gallons	N/A	N/A	4.65
Over 600,000 gallons	N/A	N/A	6.27
Standpipe Commodity Rates			
Bulk Sales (per 1,000 gallons)	\$5.50	\$6.35	\$6.05
Vending Rate per 40 gallons	0.25	0.25	0.25

RATE DESIGN Cont.

Other Service Charges			
Establishment	\$25.00	\$30.00	\$30.00
Establishment (After Hours)	40.00	N/A	Remove from Tariff
Reconnection (Delinquent)	40.00	40.00	30.00
Reconnection (After Hours)	40.00	N/A	Remove from Tariff
Meter Test (If Correct)	40.00	40.00	20.00
NSF Check	25.00	25.00	25.00
Meter Reread (If Correct)	15.00	15.00	15.00
Deposit	*	*	*
Deposit Interest (Per Month)	**	**	**
Deferred Payment (Per Month)	***	***	***
Late Charge (Per Month)	***	***	***
Re-establishment (Within 12 Months)	****	****	****
Main Extension	Cost	N/A	N/A
After Hour Service Charge (at customers request)	N/A	50.00	50.00
Monthly Service Charge for Fire Sprinkler			
All Sizes	*****	*****	*****

* Per Commission Rule A.A.C. R-14-2-403(B)(7).

** Per Commission Rule A.A.C. R-14-2-403(B)(3).

*** 1.50% of unpaid monthly balance.

**** Month off system times the monthly minimum A.A.C. R14-2-403(D).

***** 2% of Monthly Minimum for a Comparable Sized Meter Connection, but no less than \$10.00 per month. The Service Charge for Fire Sprinklers is only applicable to service lines separate and distinct from the primary water service

***** 2% of Monthly Minimum for a Comparable Sized Meter Connection, but no less than \$11.00 per month. The Service Charge for Fire Sprinklers is only applicable to service lines separate and distinct from the primary water service
In addition to the collection of regular rates, the utility will collect from its customers a proportionate share of any privilege, sales, use, and franchise tax. Per commission rule A.A.C. 14-2-409D(5).

Service and Meter Installation Charges

Description	Present Rate			Proposed Rate	Staff Recommended
	Service Line	Meter Charge	Total Charge		
5/8 x 3/4 Inch	\$445	\$155	\$600	No change	No change
3/4 Inch	445	255	700	No change	No change
1 Inch	495	315	810	No change	No change
1 1/2 Inch	550	525	1,075	No change	No change
2 Inch Turbine	830	1,045	1,875	No change	No change
2 Inch Compound	830	1,890	2,720	No change	No change
3 Inch Turbine	1,045	1,670	2,715	No change	No change
3 Inch Compound	1,165	2,545	3,710	No change	No change
4 Inch Turbine	1,490	2,670	4,160	No change	No change
4 Inch Compound	1,670	3,645	5,315	No change	No change
6 Inch Turbine	2,210	5,025	7,235	No change	No change
6 Inch Compound	2,330	6,920	9,250	No change	No change
8 Inch Turbine	3,000	7,500	10,500	No change	No change
8 Inch Compound	3,200	8,000	11,200	No change	No change

Typical Bill Analysis Without the Delinquent Property Tax Surcharge

General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	3,657	\$33.40	\$38.79	\$5.39	16.14%
Median Usage	2,364	29.46	33.27	3.81	12.95%
Staff Recommended					
Average Usage	3,657	\$33.40	\$35.21	\$1.80	5.39%
Median Usage	2,364	29.46	30.21	0.75	2.55%

Present & Proposed Rates (Without Taxes)
General Service 5/8 x 3/4-Inch Meter

Gallons	Company Proposed		Staff Recommended	
	Present	%	Recommended	%
Minimum Charge	\$22.25	\$25.00	\$23.00	
1st Tier Rate	\$3.05	\$3.50	\$3.05	
1st Tier Breakover	4,000	3,000	3,000	
2nd Tier Rate	\$4.60	\$5.00	\$4.65	
2nd Tier Breakover	9,000	8,000	8,000	
3rd Tier Rate	\$5.50	\$6.35	\$6.18	

Consumption	Rates	Rates	Increase	Rates	Increase
-	\$22.25	\$25.00	12.36%	\$23.00	3.37%
1,000	25.30	28.50	12.65%	26.05	2.96%
2,000	28.35	32.00	12.87%	29.10	2.65%
3,000	31.40	35.50	13.06%	32.15	2.39%
4,000	34.45	40.50	17.56%	36.80	6.82%
5,000	39.05	45.50	16.52%	41.45	6.15%
6,000	43.65	50.50	15.69%	46.10	5.61%
7,000	48.25	55.50	15.03%	50.75	5.18%
8,000	52.85	60.50	14.47%	55.40	4.82%
9,000	57.45	66.85	16.36%	61.58	7.19%
10,000	62.95	73.20	16.28%	67.76	7.64%
11,000	68.45	79.55	16.22%	73.94	8.02%
12,000	73.95	85.90	16.16%	80.12	8.34%
13,000	79.45	92.25	16.11%	86.30	8.62%
14,000	84.95	98.60	16.07%	92.48	8.86%
15,000	90.45	104.95	16.03%	98.66	9.08%
16,000	95.95	111.30	16.00%	104.84	9.27%
17,000	101.45	117.65	15.97%	111.02	9.43%
18,000	106.95	124.00	15.94%	117.20	9.58%
19,000	112.45	130.35	15.92%	123.38	9.72%
20,000	117.95	136.70	15.90%	129.56	9.84%
25,000	145.45	168.45	15.81%	160.46	10.32%
30,000	172.95	200.20	15.76%	191.36	10.64%
35,000	200.45	231.95	15.71%	222.26	10.88%
40,000	227.95	263.70	15.68%	253.16	11.06%
45,000	255.45	295.45	15.66%	284.06	11.20%
50,000	282.95	327.20	15.64%	314.96	11.31%
75,000	420.45	485.95	15.58%	469.46	11.66%
100,000	557.95	644.70	15.55%	623.96	11.83%

Typical Bill Analysis Including the Delinquent Property Tax Surcharge

General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	3,657	\$33.40	\$38.79	\$5.39	16.14%
Median Usage	2,364	29.46	33.27	3.81	12.95%
Staff Recommended					
Average Usage	3,657	\$33.40	\$53.23	\$19.83	59.36%
Median Usage	2,364	29.46	48.24	18.78	63.74%

Present & Proposed Rates (Without Taxes)
General Service 5/8 x 3/4-Inch Meter

Gallons	Company			Staff	
	Present	Proposed	%	Recommended	%
Minimum Charge	\$22.25	Minimum Charge	\$25.00	Minimum Charge	\$23.00
1st Tier Rate	\$3.05	1st Tier Rate	\$3.50	1st Tier Rate	\$3.05
1st Tier Breakover	4,000	1st Tier Breakover	3,000	1st Tier Breakover	3,000
2nd Tier Rate	\$4.60	2nd Tier Rate	\$5.00	2nd Tier Rate	\$4.65
2nd Tier Breakover	9,000	2nd Tier Breakover	8,000	2nd Tier Breakover	8,000
3rd Tier Rate	\$5.50	3rd Tier Rate	\$6.35	3rd Tier Rate	\$6.18
				Delinquent Property Tax Surcharge	\$18.03

Consumption	Rates	Rates	Increase	Rates	Increase
-	\$22.25	\$25.00	12.36%	\$41.03	84.40%
1,000	25.30	28.50	12.65%	\$44.08	74.22%
2,000	28.35	32.00	12.87%	\$47.13	66.24%
3,000	31.40	35.50	13.06%	\$50.18	59.80%
4,000	34.45	40.50	17.56%	\$54.83	59.15%
5,000	39.05	45.50	16.52%	\$59.48	52.31%
6,000	43.65	50.50	15.69%	\$64.13	46.92%
7,000	48.25	55.50	15.03%	\$68.78	42.55%
8,000	52.85	60.50	14.47%	\$73.43	38.94%
9,000	57.45	66.85	16.36%	\$79.61	38.57%
10,000	62.95	73.20	16.28%	\$85.79	36.28%
11,000	68.45	79.55	16.22%	\$91.97	34.36%
12,000	73.95	85.90	16.16%	\$98.15	32.72%
13,000	79.45	92.25	16.11%	\$104.33	31.31%
14,000	84.95	98.60	16.07%	\$110.51	30.09%
15,000	90.45	104.95	16.03%	\$116.69	29.01%
16,000	95.95	111.30	16.00%	\$122.87	28.05%
17,000	101.45	117.65	15.97%	\$129.05	27.20%
18,000	106.95	124.00	15.94%	\$135.23	26.44%
19,000	112.45	130.35	15.92%	\$141.41	25.75%
20,000	117.95	136.70	15.90%	\$147.59	25.13%
25,000	145.45	168.45	15.81%	\$178.49	22.71%
30,000	172.95	200.20	15.76%	\$209.39	21.07%
35,000	200.45	231.95	15.71%	\$240.29	19.87%
40,000	227.95	263.70	15.68%	\$271.19	18.97%
45,000	255.45	295.45	15.66%	\$302.09	18.26%
50,000	282.95	327.20	15.64%	\$332.99	17.68%
75,000	420.45	485.95	15.58%	\$487.49	15.94%
100,000	557.95	644.70	15.55%	\$641.99	15.06%

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP

Chairman

GARY PIERCE

Commissioner

BRENDA BURNS

Commissioner

BOB BURNS

Commissioner

SUSAN BITTER SMITH

Commissioner

IN THE MATTER OF THE APPLICATION)
OF MT. TIPTON WATER COMPANY,)
INC. FOR A PERMANENT INCREASE IN)
ITS WATER RATES AND CHARGES)
_____)

DOCKET NO. W-02105A-13-0415

DIRECT

TESTIMONY

OF

DOROTHY HAINS, P. E.

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MAY 21, 2014

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1 **INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Dorothy Hains. My business address is 1200 West Washington Street, Phoenix,
4 Arizona 85007.

5
6 **Q. By whom and in what position are you employed?**

7 A. I am employed by the Arizona Corporation Commission (“Commission” or “ACC”) as a
8 Utilities Engineer - Water/Wastewater in the Utilities Division.

9
10 **Q. How long have you been employed by the Commission?**

11 A. I have been employed by the Commission since January 1998.

12
13 **Q. What are your responsibilities as a Utilities Engineer - Water/Wastewater?**

14 A. My main responsibilities are to inspect, investigate and evaluate water and wastewater
15 systems. This includes obtaining data, preparing reconstruction cost new and/or original cost
16 studies, investigative reports, interpreting rules and regulations, and to suggest corrective
17 action and provide technical recommendations on water and wastewater system deficiencies.
18 I also provide written and oral testimony in rate cases and other cases before the
19 Commission.

20
21 **Q. How many companies have you analyzed for the Utilities Division?**

22 A. I have analyzed more than 90 companies fulfilling these various responsibilities for
23 Commission Utilities Division Staff (“Staff”).

24
25 **Q. Have you previously testified before this Commission?**

26 A. Yes, I have testified on numerous occasions before this Commission.

1 **Q. What is your educational background?**

2 A. I graduated from the University of Alabama in Birmingham in 1987 with a Bachelor of
3 Science degree in Civil Engineering.

4
5 **Q. Briefly describe your pertinent work experience.**

6 A. Before my employment with the Commission, I was an Environmental Engineer for the
7 Arizona Department of Environmental Quality ("ADEQ") for ten years. Prior to that time, I
8 was an Engineering Technician with C. F. Hains, Hydrology in Northport, Alabama for
9 approximately five years.

10
11 **Q. Please state your professional membership, registrations, and licenses.**

12 A. I have been a registered Civil Engineer in Arizona since 1990. I am a member of the
13 American Society of Civil Engineering, American Water Works Association and Arizona
14 Water Association.

15
16 **PURPOSE OF TESTIMONY**

17 **Q. What was your assignment in this rate proceeding?**

18 A. My assignment was to provide Staff's engineering evaluations for the subject Mt. Tipton
19 Water Company, Inc. ("Mt. Tipton") rate proceeding.

20
21 **Q. What is the purpose of your testimony in this proceeding?**

22 A. To present the findings of Staff's engineering evaluation of the operations for Mt. Tipton.
23 The findings are contained in the Engineering Report that I have prepared for this
24 proceeding. The report is included as Exhibit DMH-1 to this pre-filed testimony.

25

1 **ENGINEERING REPORT**

2 **Q. Would you briefly describe what was involved in preparing your Engineering Report**
3 **for this rate proceeding?**

4 A. After reviewing the application for Mt. Tipton, I physically inspected the water system to
5 evaluate the operation and determine if any plant items were not used and useful. I contacted
6 ADEQ to determine if the water system was in compliance with the Safe Drinking Water Act
7 water quality requirements. I also contacted the Arizona Department of Water Resources
8 ("ADWR") to determine if the water system was in compliance with ADWR's requirements
9 governing water providers and/or community water systems. After I obtained information
10 from Mt. Tipton regarding plant improvements, permits, chemical testing expenses and water
11 usage data, I analyzed that information. Based on all the above, I prepared the attached
12 Engineering Report for Mt. Tipton.

13
14 **Q. Please describe the information contained in your Engineering Report for Mt. Tipton.**

15 A. The Report is divided into three general sections: 1) *Executive Summary*, 2) *Engineering Report*
16 *Discussion*, and 3) *Engineering Report Exhibits*. *The Engineering Report Discussion* is further divided
17 into eleven subsections: A) Purpose of Report; B) Location of the Company; C) Description
18 of System; D) Water Usage; E) Non-Account Water; F) Growth Projection; G) ADEQ
19 Compliance; H) ADWR Compliance; I) ACC compliance; J) Water Testing Expenses; K)
20 Depreciation Rates; and L) Other Issues. These subsections provide information about the
21 water systems serving Mt. Tipton.

22

1 **RECOMMENDATIONS AND CONCLUSIONS**

2 **Q. What are Staff's conclusions and recommendations regarding the operations of Mt.**
3 **Tipton?**

4 **A. Staff's conclusions and recommendations regarding the Mt. Tipton's operations are listed**
5 **below.**

6
7 **Conclusions:**

8 I. A check of the Commission's Compliance Section database dated December 19,
9 2013, indicates there is no delinquent compliance item for Mt. Tipton.

10

11 II. Staff received a compliance status report from ADEQ dated December 20, 2013, in
12 which ADEQ stated that Mt. Tipton's System (PWS No. 08-059) has no major
13 deficiencies and is delivering water that meets water quality standards required by 40
14 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative
15 Code, Title 18, Chapter 4.

16

17 III. Mt. Tipton is not located in any ADWR Active Management Area. According to an
18 ADWR compliance status report dated December 13, 2013, the Company is currently
19 compliant with ADWR requirements governing water providers and/or community water
20 systems.

21

22 IV. Mt. Tipton has approved Cross Connection and Curtailment tariffs on file with the
23 Commission.

24

25 V. The Mt. Tipton water system has adequate production and storage capacity to
26 support the existing customer base and reasonable growth.

1 VI. Staff concludes that the Detrital Well (Well No. 4), Spring Well (Well No. 9), Church
2 Well (LDS Well or Well No. 3) and Office Well (DWR No. 55-606511) are no longer
3 in service. During its field inspection, Staff observed that these wells have been
4 capped or are otherwise not used and useful to the Company's provision of service.

5
6 VII. An existing 125 KVA on-site generator located at the Detrital Well has been relocated
7 to the Office Well site after the lease from the US Bureau of Land Management ("US
8 BLM") expired. Due to a lack of funding, Mt. Tipton has not connected the
9 generator to the Office Well's electrical control panel. Mt. Tipton estimates that the
10 reconnection of the generator will cost approximately \$3,736. Staff believes Mt.
11 Tipton's cost estimate of \$3,736 is reasonable.

12
13 VIII. Staff concludes that the estimated original costs were \$29,012 for the Church Well
14 (DWR No. 55-520733) and \$15,358 for the Spring Well (DWR No. 55-601849).

15
16 **Recommendations:**

17 I. Staff recommends estimated annual water testing costs of \$4,306 for Mt. Tipton.

18
19 II. Staff recommends the depreciation rates by individual National Association of
20 Regulatory Utility Commissioners ("NARUC") category, as delineated in Figure 5 in
21 Report DMH-1.

22
23 III. Staff recommends continued use of Mt. Tipton's currently authorized meter and
24 service line installation charges listed under the columns labeled "Staff
25 Recommendation" in Table 4 in Report DMH-1.
26

1 IV. The calculated water loss during the test year in Mt. Tipton's potable water system
2 was 27 percent which exceeds Staff's recommended 10 percent threshold. Staff
3 recommends that Mt. Tipton prepare a report containing a detailed analysis and plan
4 to reduce water loss to 10 percent or less for its potable water system before Mt.
5 Tipton files its next rate case. If Mt. Tipton believes that it is not cost effective to
6 reduce the water loss to less than 10 percent, Staff recommends that Mt. Tipton
7 submit a detailed cost benefit analysis to support its opinion. In no case should Mt.
8 Tipton allow the water loss to be greater than 15 percent.

9
10 V. Staff recommends that Mt. Tipton begin its non-potable water usage monitoring and
11 reporting program immediately. Staff further recommends that Mt. Tipton be
12 required to file water loss progress reports each January and July with Docket
13 Control, as a compliance item in this docket. The progress reports should cover the
14 previous six months. Staff further recommends that the first water loss progress
15 report be filed in January, 2015.

16
17 VI. Staff recommends that Mt. Tipton file with Docket Control, as a compliance item in
18 this docket within 90 days of the effective date of a decision in this proceeding, at
19 least five BMPs in the form of tariffs that substantially conform to the templates
20 created by Staff for the Commission's review and consideration. Staff further
21 recommends that Mt. Tipton use the templates created by Staff that are available on
22 the Commission's website at <http://www.azcc.gov/Divisions/Utilities/forms.asp>. A
23 maximum of two BMPs may come from the "Public Awareness/Public Relations" or
24 "Education and Training" categories. The Company may request cost recovery of the
25 actual costs associated with the BMPs implemented in its next general rate
26 application.

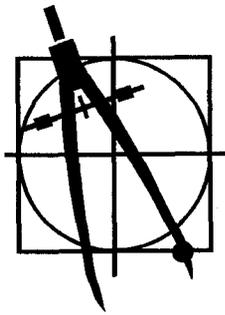
1 VII. The Company installed a 5/8" x 3/4" new bulk meter at its coin operated standpipe
2 station. Staff believes that 5/8" x 3/4" meter is undersized. The Company agrees
3 with Staff and plans to replace this meter. Staff recommends that the Company
4 upgrade this meter to a 2" meter within 90 days of the effective date of the order in
5 this matter.
6

7 VIII. The Company claimed \$53,075 in capital improvements for Chemical Solution
8 Feeders (NARUC Account No. 320.2). However, there is no disinfection injector
9 units or any other chemical injection devices installed in the system. In addition the
10 Company could not identify any other plant items that could account for this
11 investment. Staff recommends \$53,075 be removed from NARUC Account No.
12 320.2.
13

14 IX. For accounting purposes, expense for purchasing the generator should be reclassified
15 from NARUC account No. 307 (for wells and springs) to NARUC account No. 310
16 (for power generation equipment). Staff recommends that \$27,400 be moved to
17 NARUC account No. 310 (for power generation equipment).
18

19 **Q. Does this conclude your Direct Testimony?**

20 **A. Yes, it does.**



Engineering Report
Mt. Tipton Water Company, Inc.
Prepared By
Dorothy Hains, P. E.
Docket No. W-02105A-13-041
(Rates)

May 21, 2014

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**ENGINEERING REPORT
MT. TIPTON WATER COMPANY, INC.
DOCKET NO. W-02105A-13-0415 (RATES)**

A. PURPOSE OF REPORT

This report was prepared in response to the application filed by Mount Tipton Water Company, Inc. ("Mt. Tipton" or "Company") with the Arizona Corporation Commission ("ACC" or "the Commission") to increase its water rates. The ACC Utilities Division Staff ("Staff") engineering review and analysis of the subject application is presented in this report.

An inspection of the Company's water systems was conducted by Dorothy Hains, Staff Engineer, accompanied by Company Representatives, Tim Clark (Field Supervisor) and Don Bertoch (President) on February 11 and 12, 2013.

B. LOCATION OF THE COMPANY

The Company is located approximately 35 miles northeast of the City of Kingman in Mohave County. Figure 1 describes the Certificate of Convenience and Necessity ("CC&N") area of Mt. Tipton, and Figure 2 describes the location of Mt. Tipton. The Company serves an area approximately ten and one-half square miles in size that includes whole or portions of Sections 1, 2, 3, 9, 10, 11, 17, 15, 16, 19 and 20 of Township 25 North, Range 19 West, portions of Sections 35 and 36 of Township 26 North, Range 19 West and Sections 19 and 31 of Township 26 North, Range 18 West.

C. DESCRIPTION OF SYSTEM

I. System Description

A. Potable Water System

The Company owns and operates a potable water system ("water system") in which Public Water System ("PWS") Identification No. 08-059 was assigned by the Arizona Department of Environmental Quality ("ADEQ"). The water system consists of five active drinking water wells capable of producing a total flow of 277 gallons per minute ("GPM"); 531,000 gallons of storage capacity; several booster systems and a distribution system serving 663 metered connections.

Exhibits 3A and 3B are schematic drawings of the potable water system. A detailed listing of plant items for the Company's water system follows:

Table 1A Plant Data in Mt. Tipton (PWS No. 08-059)
Active Wells (PWS No. 08-059)

ADWR No.	Well #	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
55-911950 (Office Well)	1	2010	8	806	3	40	140	15966 Ironwood Dr
55-508835 (Iron Well)	2	1984	8	700	3	15	35	Near 15917 Iron St
55-510178 (Chambers Well)	5	1985	8	900	3	15	36	Near 14385 Canyon St
55-601847 (Tank Well)	7	1978	6	500	2	15	45	Near 16078 Tom White Dr.
55-601848 (Horizontal Well)	8	1972	2	147	3	none	21	Near Mt. Tipton High School

Active Storage, Pumping (PWS No. 08-059)

Location	Structure or equipment	Capacity
Tank #3 Site (Mid-elevation Tank) On Ironwood Dr.	Storage Tank	One 55,000 gal One 80,000 gal
Tank #3 Site (Mid-elevation Tank) On Ironwood Dr.	Booster pump station	Two 5-HP pumps
Tank #1 Site (High-elevation Tank) on Ironwood Dr,	Storage Tank	One 200,000 gal One 50,000 gal
Well #5 (Chambers Well) Near 14385 Canyon St	Storage Tank	One 10,000 gal
Well #5 (Chambers Well) Near 14385 Canyon St	Pressure Tank	One 1,000 gal
Well #5 (Chambers Well) Near 14385 Canyon St	Booster pump station	One 5-HP
Well #7 (Tank Well) Near 16078 Tom White Dr.	Storage Tank	Two 10,000 gal One 8,500 gal
Well #7 (Tank Well) Near 16078 Tom White Dr.	Booster pump station	One 7.5-HP One 10-HP
Tank #4 (Dolan Springs Tank) on Ironwood Dr	Storage Tank	One 25,000 gal One 50,000 gal

Distribution Mains (PWS No. 08-059)

Diameter (inches)	Material	Length (feet)
2	various	70,093
3	various	1,975
4	various	31,484
6	various	80,157
8	various	12,255

Meters (PWS No. 08-059)

Size (inches)	Quantity
$\frac{5}{8} \times \frac{3}{4}$	654
$\frac{3}{4}$	N/A
1	2
1½	1
2	2
3 (comp)	N/A
3 (Turbo)	N/A
4 (comp)	1
4 (Turbo)	N/A
6 (comp)	N/A
6 (Turbo)	N/A
Bulk Non-potable	3

Inactive Drinking Water Well (PWS No. 08-059)

ADWR No.	Well #	Year Drilled	Year capped/terminate leasing	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Locations
55-520733 (Church Well or LDS Well)	3	1988	2012 (capped)	8	540	3	5	10	Perry Ferry Rd near LDS Church
55-502441 (Detrital Well)	4	1982	Terminate lease	8	640	3	50	240	HWY 93
55-601849 (Spring Well)	9	n/a	capped	n/a	n/a	2	3	0.8	Near Mt. Tipton High School

- Notes: 1. The Company leased the well site from the State Land. The lease expired in August 2012; due to well casing collapsed, the Company decided not to renew the lease.
2. The Company leased the Detrital Well site from the U. S. Bureau of Land Management ("BLM"). By January 2012, the lease expired; the Company does not want to renew this lease. BLM terminated the lease and the well is used by a local ranger.
3. In April 2010, lightning destroyed the well. Due to low yield prior to April 2010, the Company decided to cap the well, and disconnected the well from the system.

B. Non-potable Water System

The Company owns and operates a non-potable water system that ADEQ does not regulate. The system consists of two artesian wells that can produce approximately 12 GPM water, three storage tanks¹ and a 3-inch standpipe system serving its non-potable water users. To avoid damaging its non-potable water storage tank structures, the Company operates its 70,000 gallon non-potable water storage tank half full. Excess water discharges into an unnamed wash.

Exhibit 3C is the schematic drawing of the non-potable water system.² A detailed listing of plant items for the Company's non-potable system follows:

¹ Tanks sizes are unknown.

² The non-potable water system is not regulated by ADEQ.

Table 1B Non-potable Water Plant Items

Active Non-potable Water Source

ADWR No.	Well #	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
N/A	1 (artesian well)	2005	8	n/a	2	none	n/a	Near Mt. Tipton High School
N/A	2 (artesian well)	2005	8	n/a	2	none	n/a	Near Mt. Tipton High School

Active Non-potable Water Storage, Pumping

Location	Structure or equipment	Capacity
Near Mt Tipton High School & Well #9 & artesian wells No. 1 & No. 2	Two horizontal storage tanks	unknown
Near Mt Tipton High School & Well #9 & artesian wells No. 1 & No. 2	One vertical storage tank	Approximately 70,000 gallon only half in use

II. System Analysis

A. Potable Water System (PWS No. 08-059)

The water system has a source capacity of 227 GPM and storage capacity of 531,000 gallons which is adequate to serve the present customer base and reasonable growth.

B. Non-potable Water System

The system has adequate production to serve its non-potable water users.

D. WATER USAGE

A. Potable Water System (PWS No. 08-059)

Table 2A summarizes water usage in the Company's service area. Exhibit 4A is a graph that shows the Company's potable water consumption data in gallons per day ("GPD") per connection during the test year.

Table 2A Test Year Water Usage (PWS No. 08-059)

Month	Number of Customers	Water Sold (gallons)	Water pumped (gallons)	Water purchased (gallons)	Daily Average (gpd/customer)
Jul 12	672	3,975,000	4,929,000	0	191
Aug 12	674	3,232,000	4,339,000	0	155
Sep 12	673	2,803,000	4,312,000	0	139
Oct 12	673	2,673,000	3,669,000	0	128
Nov 12	672	2,864,000	3,306,000	0	142
Dec 12	662	1,828,000	3,267,000	0	89
Jan 13	664	3,586,000	4,546,000	0	176
Feb 13	659	1,669,000	2,967,000	0	90
Mar 13	662	2,363,000	3,462,000	0	115
Apr 13	653	2,603,000	3,767,000	0	133
May 13	664	3,385,000	4,183,000	0	164
Jun 13	663	3,785,000	5,021,000	0	190
total		34,766,000	47,768,000	0	
Average					143

Based on information provided by the Company, during the test year the Company experienced an overall daily average use of 143 GPD per customer, a high use of 191 GPD per customer, and a low use of 89 GPD per customer. The highest total monthly use occurred in July when a total of 3,975,000 gallons were sold to 672 customers. The lowest total monthly use occurred in December when 1,828,000 gallons were sold to 662 customers.

B. Non-potable Water System

Table 2B summarizes non-potable water usage in the Company's service area. Exhibit 4B is a graph that shows non-potable water consumption data in GPD per connection for the Company during the test year.

Table 2B 2012-2013 Non-potable Water Usage

Month	Number of Customers	Water Sold (gallons)	Water pumped (gallons)	Daily Average (gpd/customer)
Jul 12	1	176,000	704,000	5,677
Aug 12	2	98,000	718,000	1,581
Sep 12	1	259,000	641,000	8,633
Oct 12	2	200,000	686,000	3,226
Nov 12	3	389,000	692,000	4,322
Dec 12	2	16,000	744,000	258
Jan 13	2	236,000	811,000	3,806
Feb 13	N/A	N/A	729,000	N/A
Mar 13	1	158,000	903,000	5,097
Apr 13	1	2,000	772,000	67
May 13	2	221,000	813,000	3,565
Jun 13	2	141,000	755,000	2,350
total		1,896,000	8,968,000	

E. NON-ACCOUNT POTABLE WATER

A. Potable Water System (PWS No. 08-059)

Non-account water should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and water produced by the source. A water balance allows a water company to identify water and revenue losses due to leakage, theft, and flushing, etc.

The calculated water loss during the test year was 27 percent which exceeds Staff's recommended 10 percent threshold. In Decision No. 72001, the Commission ordered the Company to monitor and report water loss quarterly as a compliance filing. Although the Company acknowledged that it had experienced high water loss and made some corrections, the water loss still exceeded Staff's recommended 10 percent threshold during the test year.

Staff recommends that the Company prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less before the Company files its next rate case. If the Company believes it is not cost effective to reduce water loss to less than 10 percent, Staff further recommends that the Company submit a detailed cost benefit analysis to support its opinion. In no case should the Company allow water loss to be greater than 15 percent.

B. Non-potable Water System

The calculated water loss in the non-potable water system during the test year was 79 percent. Staff recommends that the Company begin its non-potable water usage monitoring and reporting program immediately. Staff further recommends that the Company be required to file water loss progress reports each January and July with Docket Control, as a compliance item in this

docket. The progress reports should cover the previous six months. Staff further recommends that the first water loss progress report be filed in January, 2015.

F. GROWTH PROJECTION

For the past five years, this Company has experienced a decline in growth rate. Prior to the economic downturn the Company had a flat growth rate. Future growth is hard to predict since it will depend on what happens with the economy, but it is expected to be minimal.

G. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (“ADEQ”) COMPLIANCE

Staff received a compliance status report from ADEQ dated December 20, 2013, in which ADEQ stated that the Company’s water system (PWS No. 08-059) has no major deficiencies and is delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.

H. ARIZONA DEPARTMENT OF WATER RESOURCES (“ADWR”) COMPLIANCE

The Company is not located in any ADWR Active Management Area. According to an ADWR compliance status report dated December 13, 2013, the Company is currently compliant with ADWR requirements governing water providers and/or community water systems.

I. ACC COMPLIANCE

A check of the Commission’s Compliance Section database dated December 19, 2013, indicates there is no delinquent compliance item for Mt. Tipton.

J. WATER TESTING EXPENSES

The Company reported its water testing expense at \$3,956 for the test year. Staff has reviewed the Company’s reported expense amount and has recalculated these expenses. Staff recommends that Staff’s water testing expense of \$4,306 be used for this proceeding.

Mt. Tipton is subject to mandatory participation in the ADEQ Monitoring Assistance Program (“MAP”). Staff calculated the testing costs based on the following assumptions:

1. MAP will do baseline testing on everything except copper, lead, bacteria, and disinfection by-products.
2. The estimated water testing expenses represent a minimum cost based on no “hits” other than lead and copper, and assume compositing of well samples. If any constituents are found, then the testing costs would dramatically increase. ADEQ testing is performed in 3-year compliance cycles. Therefore, monitoring costs are estimated for a 3-year compliance period and then presented on an annualized basis.
3. MAP fees were calculated from the ADEQ MAP invoice for calendar year 2013.

Table 3 shows Staff's estimated annual monitoring expense, based on participation in the MAP program.

Table 3 Water Testing Cost (Mt. Tipton PWS #08-059)

Monitoring – 5 wells & 5 POED	Cost per test	No. of annual tests	Annual Cost
Bacteriological – monthly	\$20	60	\$1,200
Inorganics – Priority Pollutants	\$300	MAP	MAP
Radiochemical – (1/ 4 yr)	\$60	MAP	MAP
Phase II and V:			
IOC's, SOC's, VOC's	\$2,805	MAP	MAP
Nitrites	\$20	MAP	MAP
Nitrates – annual	\$40	MAP	MAP
Asbestos – per 9 years	\$180	MAP	MAP
Lead & Copper – annual*	\$45	10/3	\$150
TTHM/HHAs – per 3 years	\$385	0	\$0
Maximum chlorine residual levels	\$20	0	\$0
Toluene ¹	\$100	1	\$100
Nitrate/nitrite ²	\$25	2	\$50
Courier Service	\$20	12	\$240
MAP fees (annual)			\$2565.57
Total			\$4,305.57

Notes: 1. Due to a paint spill at the Chambers Well site, Mt Tipton tests for toluene in the water produced by the Chambers Well annually.
2. Due to high nitrate test results, the Company takes additional samples for nitrate from the Iron Well and Kevin Well.

Staff's total recommended annual water testing cost for Mt. Tipton is \$4,306.

K. DEPRECIATION RATES

Staff has developed typical and customary depreciation rates within the range of anticipated equipment life. These rates are presented in Figure 5 and should be used to calculate the annual depreciation expense for the Company. Staff recommends the depreciation rates by individual National Association of Regulatory Utility Commissioners (“NARUC”) category, as delineated in Figure 5.

L. OTHER ISSUES

I. Service Line and Meter Installation Charges

The Company did not request any changes to its existing Service Line and Meter Installation Charges. Staff recommends continued use of the Company's currently authorized meter and service line installation charges listed under the columns labeled "Staff Recommendation" in Table 4.

Table 4 Service Line and Meter Installation Charges

Meter Size	Current Service Line Charges (Decision #72001)	Current Meter & Charges (Decision #72001)	Current Total Meter & Service Line Installation Charges (Decision #72001)	Staff Recommendation (Service Line installation charge)	Staff Recommendation (Meter charges)	Staff Recommended total charges
5/8 x 3/4-inch	\$445	\$155	\$600	\$445	\$155	\$600
3/4-inch	\$445	\$255	\$700	\$445	\$255	\$700
1-inch	\$495	\$315	\$810	\$495	\$315	\$810
1½-inch	\$550	\$525	\$1,075	\$550	\$525	\$1,075
2-inch (Turbine)	\$830	\$1,045	\$1,875	\$830	\$1,045	\$1,875
2-inch (Compound)	\$830	\$1,890	\$2,720	\$830	\$1,890	\$2,720
3-inch (Turbine)	\$1,045	\$1,670	\$2,715	\$1,045	\$1,670	\$2,715
3-inch (Compound)	\$1,165	\$2,545	\$3,710	\$1,165	\$2,545	\$3,710
4-inch (Turbine)	\$1,490	\$2,670	\$4,160	\$1,490	\$2,670	\$4,160
4-inch (Compound)	\$1,670	\$3,645	\$5,315	\$1,670	\$3,645	\$5,315
6-inch (Turbine)	\$2,210	\$5,025	\$7,235	\$2,210	\$5,025	\$7,235
6-inch (Compound)	\$2,330	\$6,920	\$9,250	\$2,330	\$6,920	\$9,250
8-inch (Turbine)	\$3,000	\$7,500	\$10,500	\$3,000	\$7,500	\$10,500
8-inch (Compound)	\$3,200	\$8,000	\$11,200	\$3,200	\$8,000	\$11,200

II. New Plant Items

The Company installed a new 5/8" x 3/4" bulk meter at its coin operated standpipe station. Staff believes that 5/8" x 3/4" meter is undersized. The Company agrees with Staff and plans to

replace this meter. Staff recommends that the Company upgrade this meter to 2" meter within 90 days of the effective date of the order in this matter.

III. Not Used and Useful Plant Items

A. Wells

The Detrital Well (Well No. 4), Spring Well (Well No. 9), Church Well (LDS Well or Well No. 3) and Office Well (DWR No. 55-606511) are no longer in service. During its field inspection, Staff observed that these wells have been capped or are otherwise not used and useful to the Company's provision of service.

B. Generator

An existing 125 KVA on-site generator located at the Detrital Well has been relocated to the Office Well³ site after the lease from the US BLM expired. Due to a lack of funding, the Company has not connected the generator to the Office Well's electrical control panel. The Company estimates that reconnection of the generator will cost approximately \$3,761⁴. Staff believes the Company's cost estimate of \$3,761 is reasonable.

C. Solution Chemical Feeders

The Company claimed \$53,075 in capital improvements for Chemical Solution Feeders (NARUC Account No. 320.2). However, there is no disinfection injector units or any other chemical injection devices installed in the system. In addition the Company could not identify any other plant items that could account for this investment. Staff recommends that \$53,075 be removed from NARUC Account No. 320.2.

IV. Curtailment Tariff

The Company has an approved Curtailment Tariff on file with the Commission.

V. Cross Connection or Backflow Prevention Tariff

The Company has an approved Cross Connection & Backflow Tariff on file with the Commission.

VI. Best Management Practices ("BMPs") Tariff

Staff recommends that Mt. Tipton file with Docket Control, as a compliance item in this docket within 90 days of the effective date of a decision in this proceeding, at least five BMPs in the

³ The new office well is now the Company's primary production well.

⁴ \$3,761 includes (1) \$396 for concrete pad installation, (2) \$882 for power transfer switch, (3) \$506 for 140 feet of AWG 3 wire, (4) \$42 for 40 feet of 2" PVC conduit, (5) \$16 for two 2-inch sweeps, (6) \$44 for four 2-inch pull boxes, (7) \$450 for moving generator, (8) \$300 for connectors, couplings, (9) \$600 for 5 days labor and (10) \$500 for one weatherproof box to house switch.

form of tariffs that substantially conform to the templates created by Staff for the Commission's review and consideration. Staff further recommends that the templates created by Staff are available on the Commission's website at <http://www.azcc.gov/Divisions/Utilities/forms.asp>.

A maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

VII. Staff's Estimated Original Costs of Not Used and Useful Plant Items

The Detrital Well (Well No. 4), the Spring Well (Well No. 9), the Church Well (LDS Well or Well No. 3) and the Office Well (DWR No. 55-606511) are no longer in service. However, the Company provided original costs for the Detrital Well and the Office Well, the estimated original costs⁵ with the NARUC accounts are listed in Table 5 below:

Table 5. Mt. Tipton Water Not Used and Useful Plant Items

	Drilling/installation (Account # 307) (\$)	Pumping House (account # 304) (\$)	Chain-link Fence (account #304) (\$)	Control Panel (account #311) (\$)	Pump (account #311) (\$)	Estimated Original Costs for each well (\$)
Church Well (55-520733) (1988)	10,684	0	6,599	3,278	8,451	29,012
Spring Well (55-601849) (1982)	7,189	0	4,633	2,740	796	15,358

VIII. Reclassification

For accounting purposes, expense for purchasing the generator should be reclassified from NARUC account No. 307 (for wells and springs) to NARUC account No. 310 (for power generation equipment). Staff recommends that the cost of \$27,400⁶ for the generator be moved to NARUC account No. 310 (for power generation equipment).

5 The Company could not provide invoices or other original cost records for this plant.

6. In the August 26, 1998 letter from Technology Construction, Inc. to Kent Norcross (Sunrise Engineering, Inc.), Technology Construction, Inc. stated work done for the 125 kva generator was \$4,400 and in December 29, 1998 letter from Mohave County Housing and Community Development & JTPA Programs to Mr. Jastremski, the Company's President and, Board of Directors stated that the cost of generator was \$23,000. Therefore, the cost of the generator was \$27,400.

FIGURE 1

MT. TIPTON Certificate Service Area

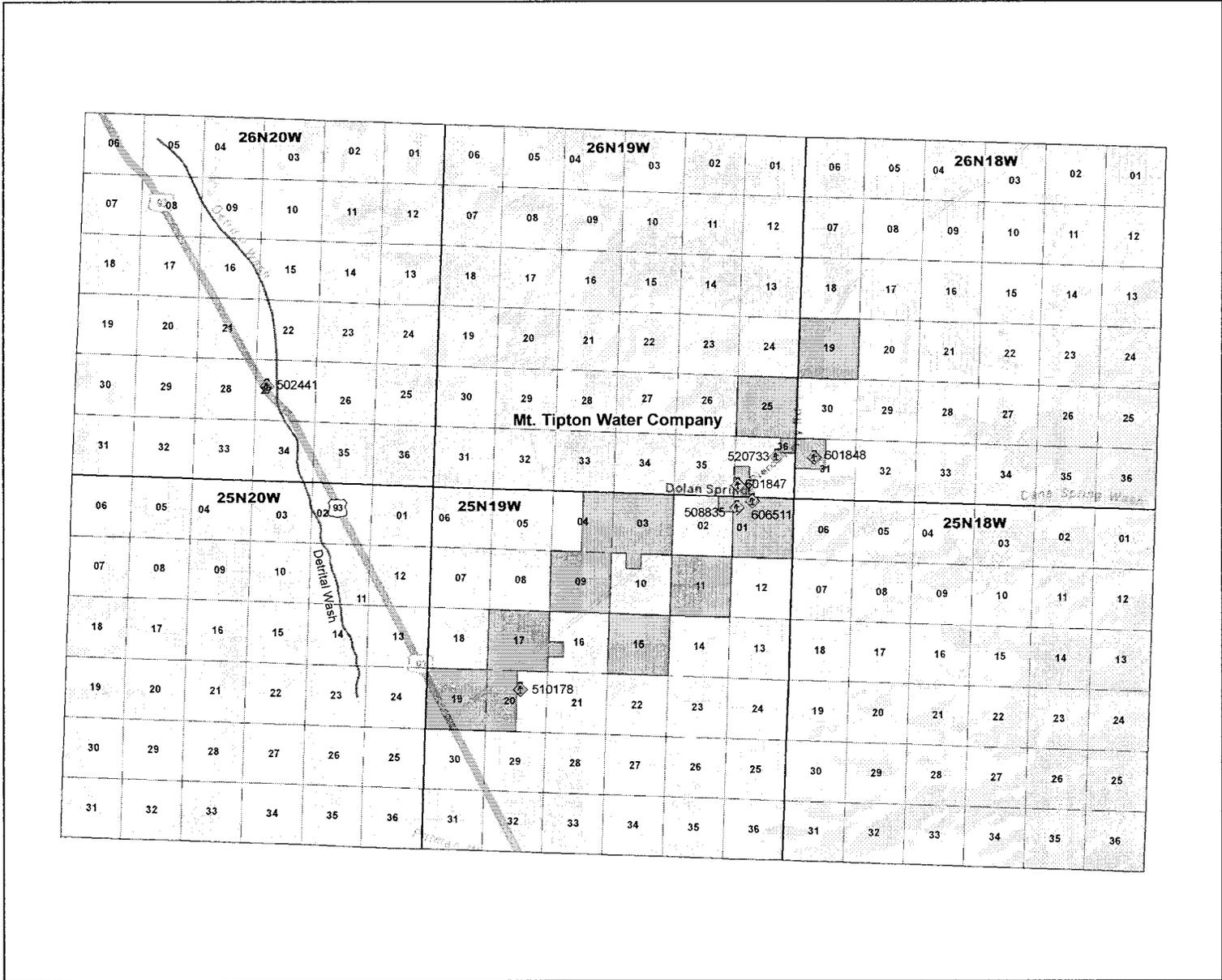


FIGURE 2

LOCATION OF MT. TIPTON SERVICE AREA

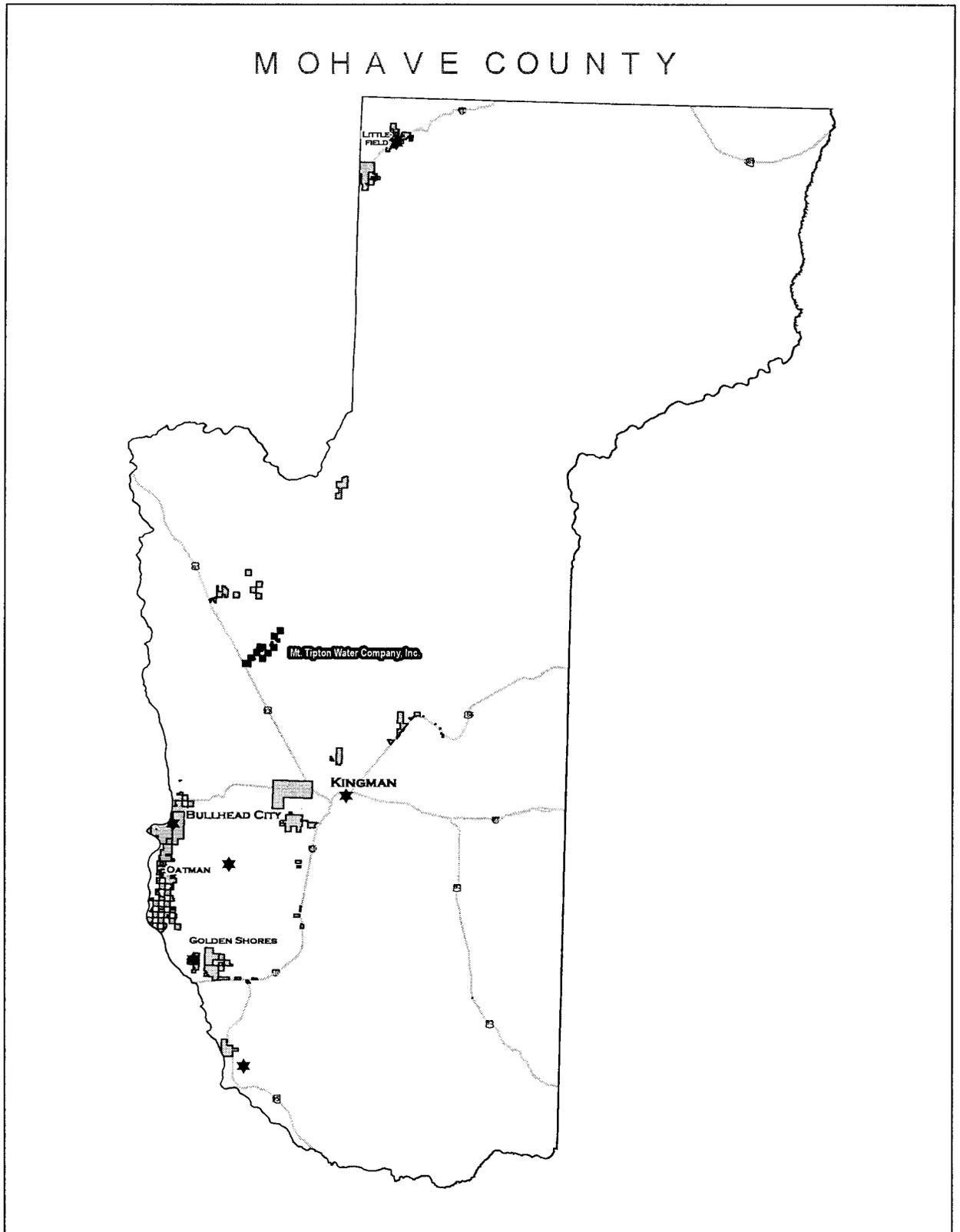


FIGURE 3A SYSTEMATIC DRAWING

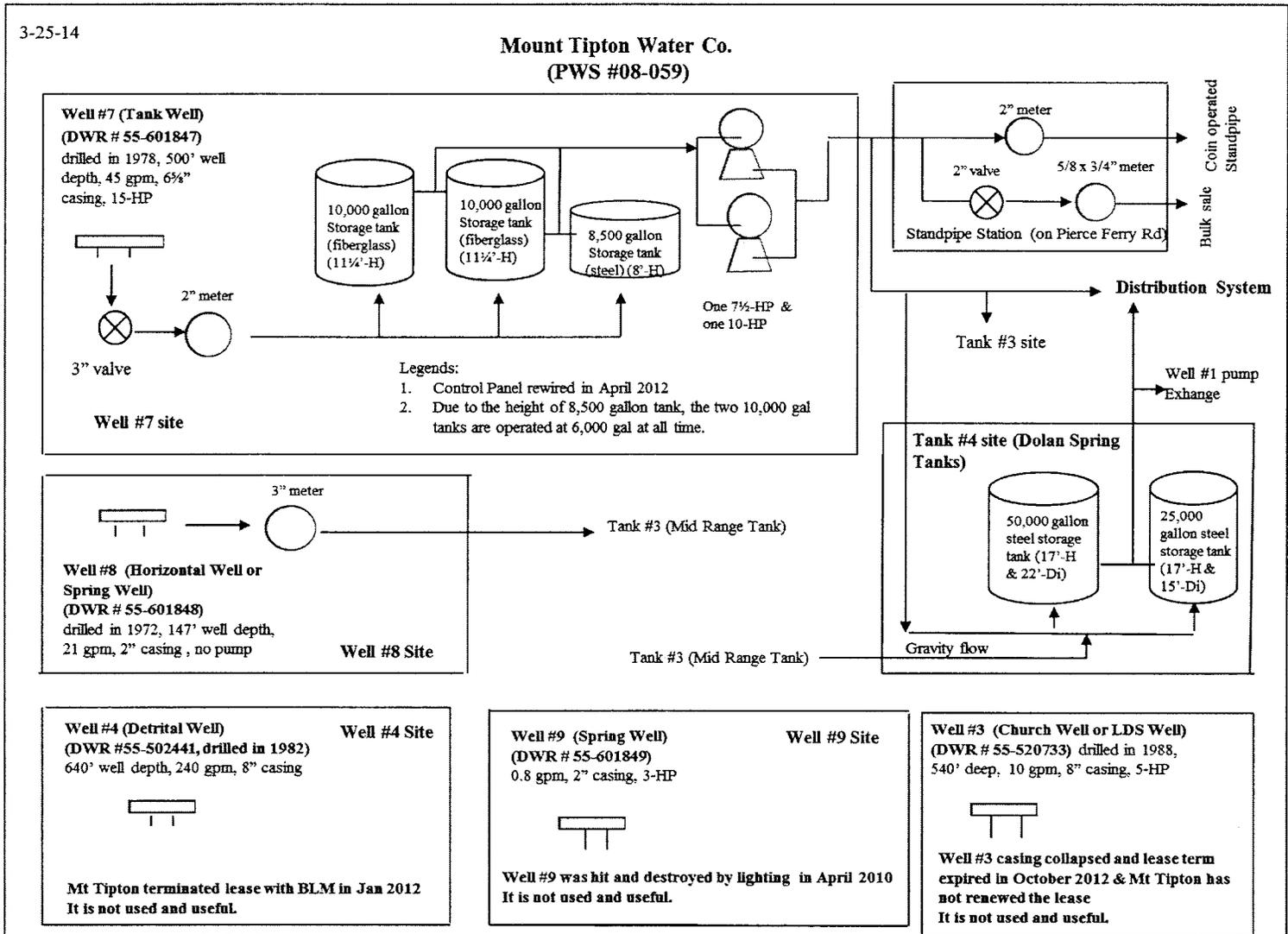


FIGURE 3B SYSTEMATIC DRAWING

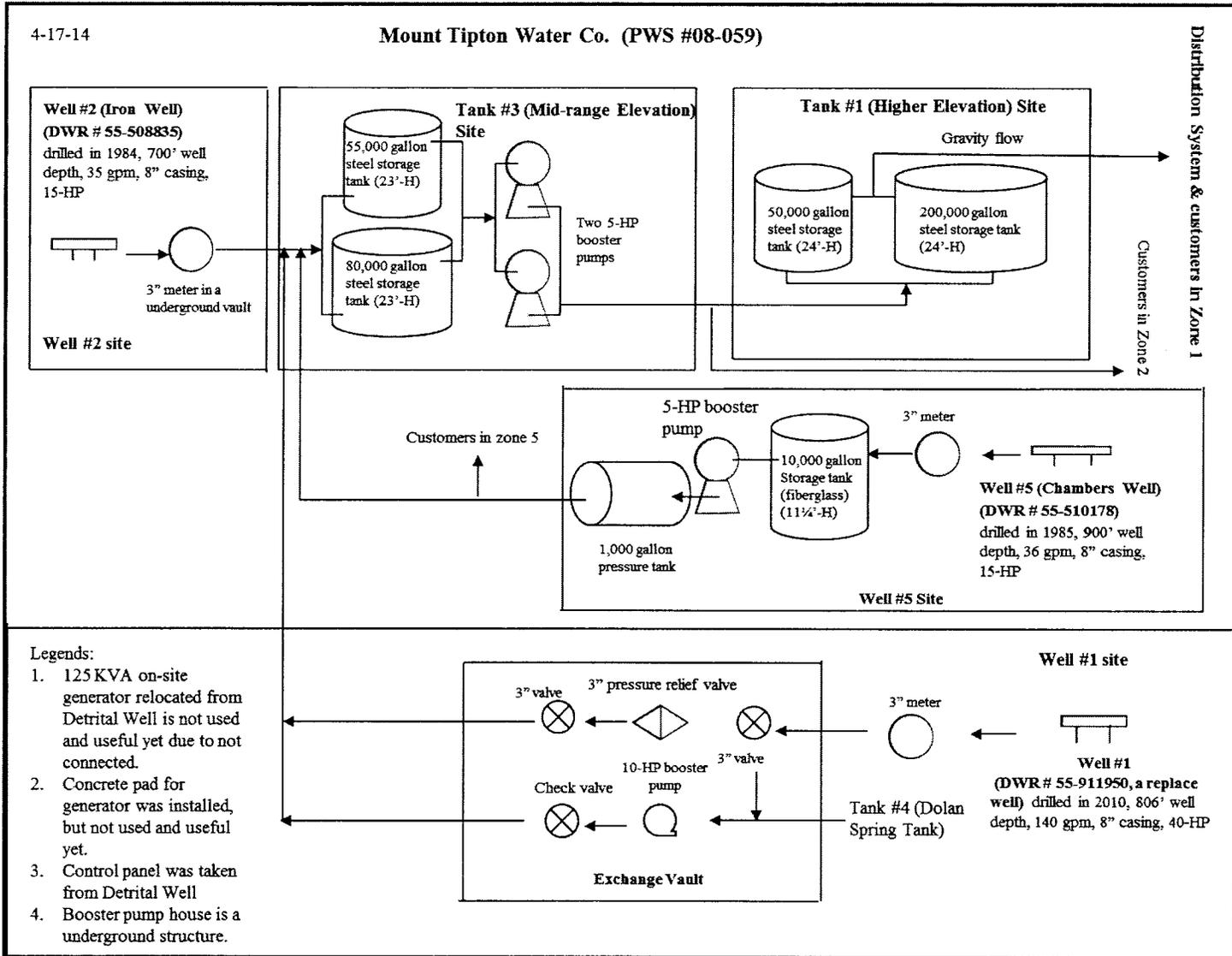


FIGURE 3C SYSTEMATIC DRAWING

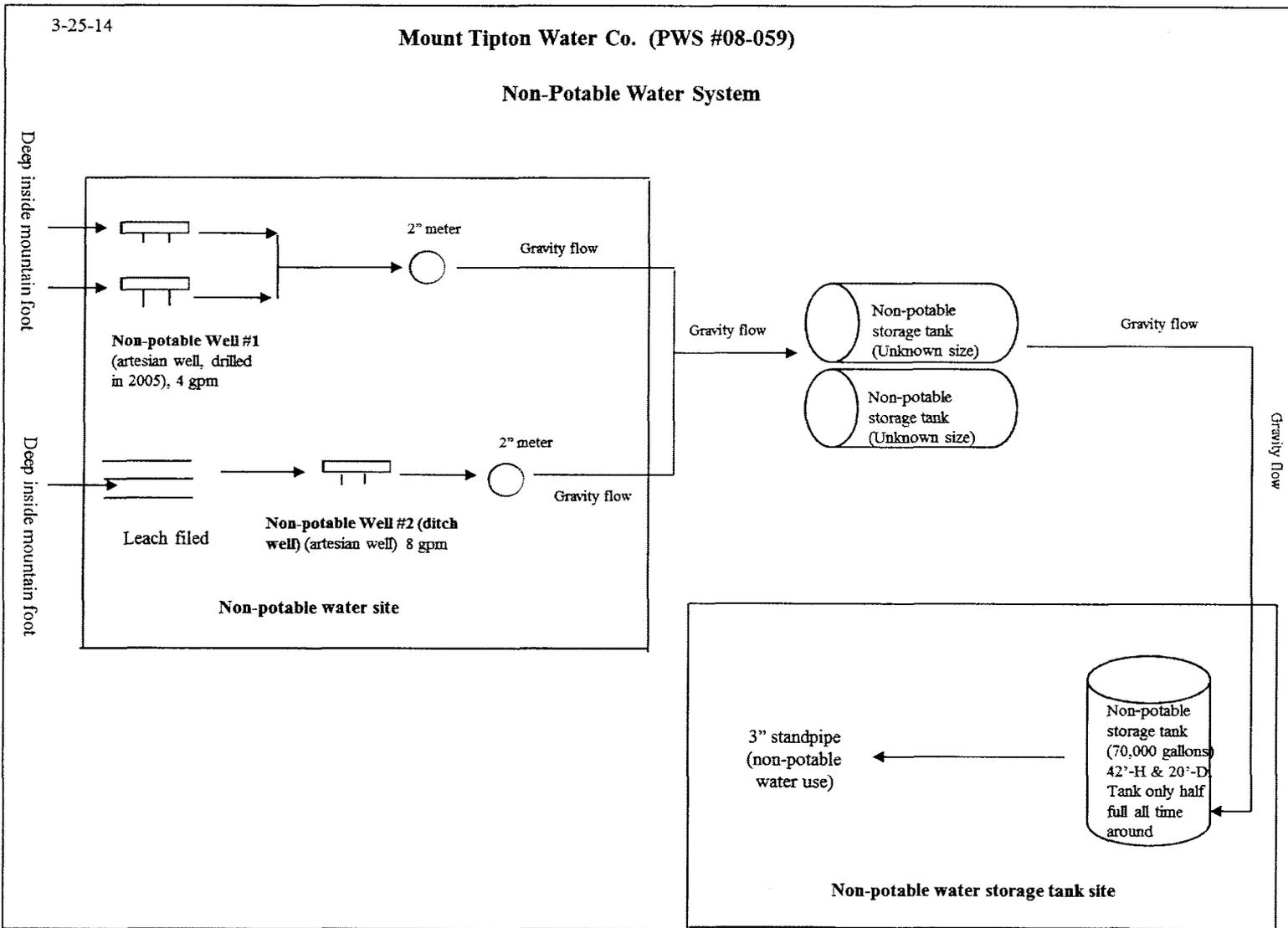


FIGURE 4A WATER USAGE IN MT. TIPTON SERVICE AREA

During Test Year (Jul 2012 - Jun 2013) Water Usage In Mt. Tipton (PWS #08-059) CC&N Area

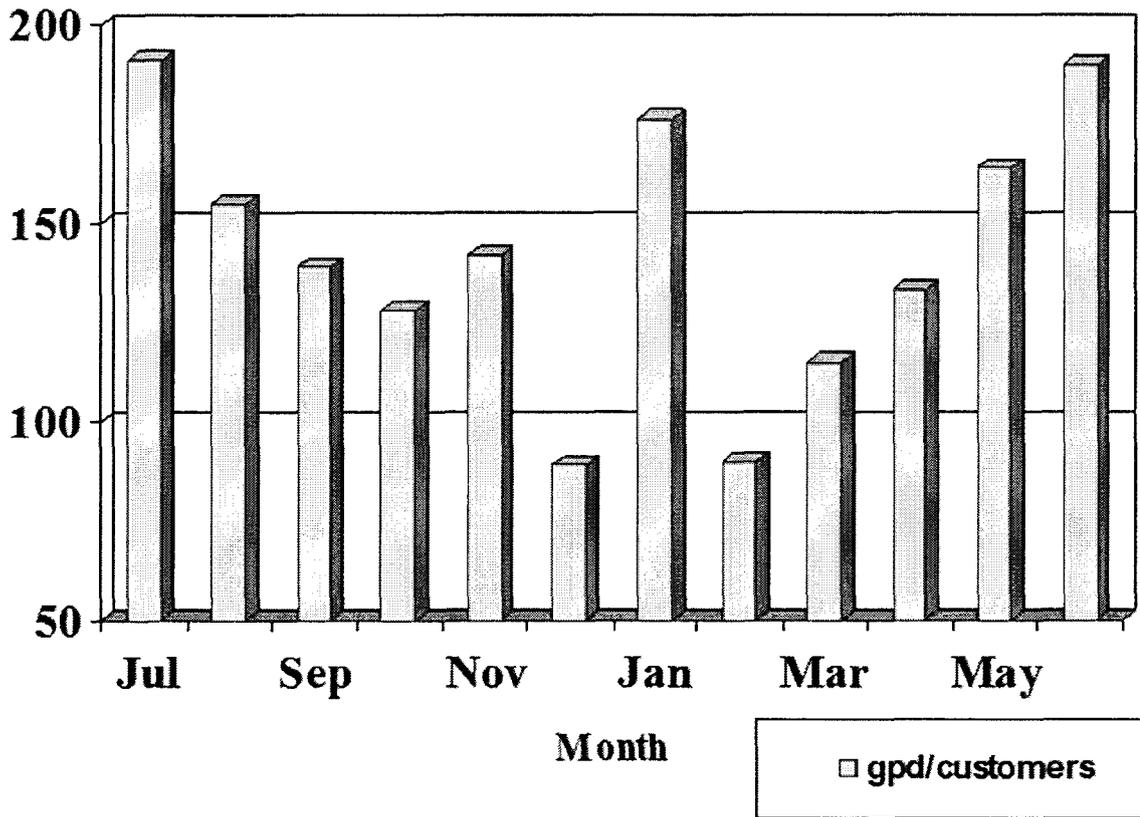
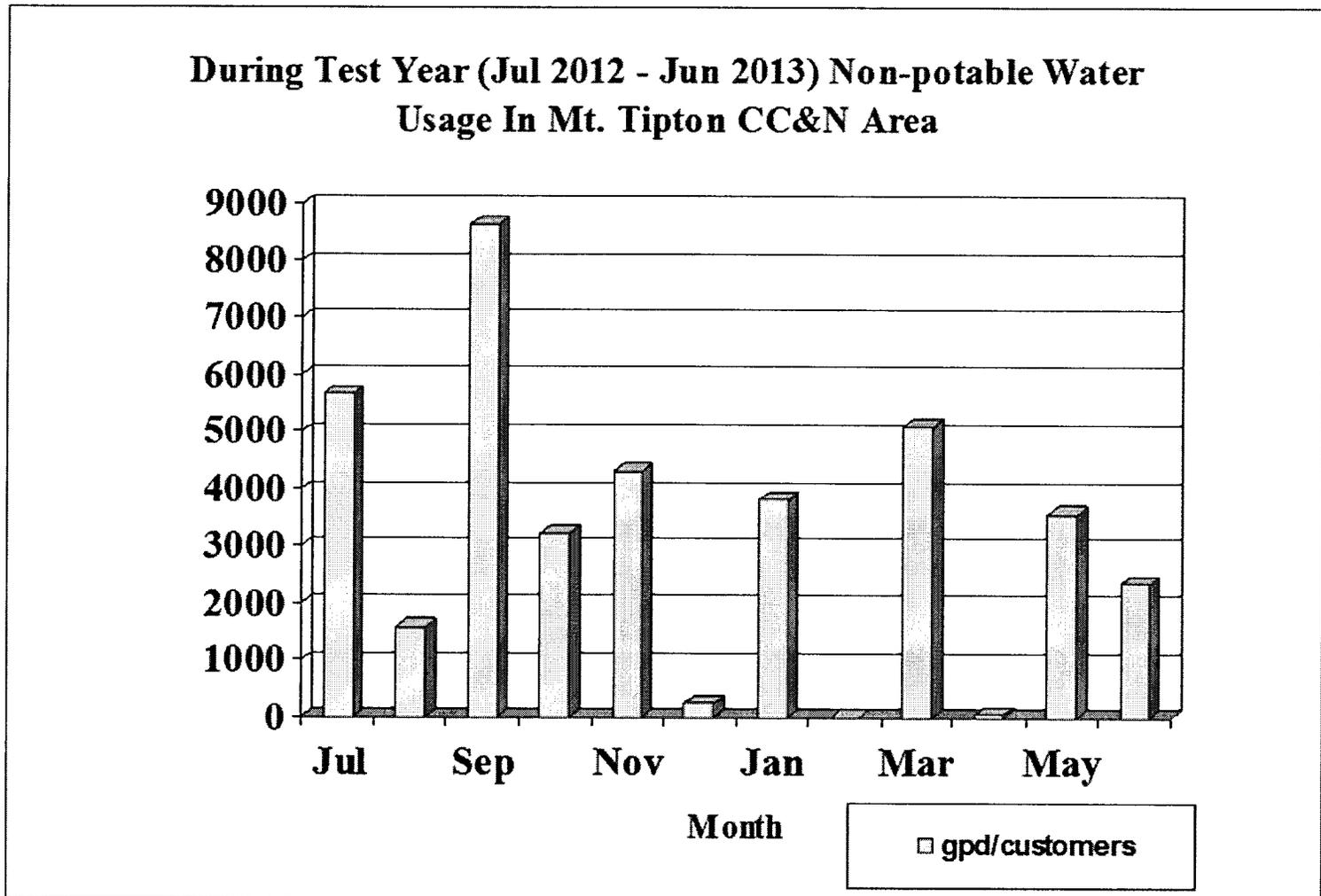


FIGURE 4B NON-POTABLE WATER USAGE IN MT. TIPTON SERVICE AREA



**FIGURE 5
DEPRECIATION RATES FOR MOUNT TIPTON WATER COMPANY**

NARU C Acct #	Depreciable Plant	Approved Rate (Decision # 72001)	Proposed Rate (%)	Staff Recommended Rate (%)
301	Organization	0	N/A	0
302	Franchises	0	N/A	0
303	Land & Land Rights	0	N/A	0
304	Structures & Improvements	3.33	3.33	3.33
305	Collection & Impounding reservoirs	2.50	N/A	2.50
306	Lake, River, Canal Intakes	2.50	N/A	2.50
307	Wells & Springs	3.33	3.33	3.33
308	Infiltration Galleries	6.67	N/A	6.67
309	Raw Water Supply Mains	2.00	N/A	2.00
310	Power Generation Equip Other	5.00	N/A	5.00
311	Pumping Equipment	12.5	12.5	12.5
320	Water Treatment		0.00	
320.1	Water Treatment Plants	3.33	3.33	3.33
320.2	Solution Chemical Feeders	20.0	20	20.0
330	Distribution Reservoirs &		0.00	
330.1	Standpipes	2.22	2.22	2.22
330.2	Storage Tank Pressure Tank	5.00	5.00	5.00
331	Transmission and Distribution Mains	2.00	2.00	2.00
333	Services	3.33	3.33	3.33
334	Meters	8.33	8.33	8.33
335	Hydrants	2.00	2.00	2.00
336	Backflow Prevention Devices	6.67	N/A	6.67
339	Other Plant & Misc. Equipment	6.67	6.67	6.67
340	Office Furniture & Equipments	6.67	6.67	6.67
340.1	Computer Software	20.00	20.00	20.00
341	Transportation Equipment	20.00	20.00	20.00
342	Store Equipments	4.00	N/A	4.00
343	Tools, Shop & Garage Equipments	5.00	5.00	5.00
344	Lab equipments	10.00	N/A	10.00
345	Power operated equipments	5.00	5.00	5.00
346	Communication Equipments	10.00	N/A	10.00
347	Miscellaneous Equipment	10.00	10.00	10.00
348	Other Tangible Plant	10.00	10.00	10.00