

**DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA**

* * * * *

IN THE MATTER OF the Investigation of the)
Montana Public Service Commission into whether) **REGULATORY DIVISION**
Mountain Water Company's rates are Just and)
Reasonable.) **DOCKET NO. D2016.2.15**
)

DIRECT TESTIMONY

OF

THOMAS J. BOURASSA

ON BEHALF OF

MOUNTAIN WATER COMPANY

April 15, 2016

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1 **I. INTRODUCTION**

2 **Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS**
3 **ADDRESS?**

4 A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive,
5 Phoenix, Arizona 85029.

6
7 **Q. WHAT IS YOUR PROFESSION AND BACKGROUND?**

8 A. I am a self-employed certified public accountant licensed in the state of Arizona.
9 I am primarily engaged in consulting to and testifying on behalf of regulated
10 utilities in regulatory matters.

11

12 **Q. HAVE YOU TESTIFIED IN OTHER PROCEEDINGS BEFORE**
13 **REGULATORY BODIES?**

14 A. Yes. I have testified in numerous regulatory proceedings before the Arizona
15 Corporation Commission. I have also testified before the California Public
16 Utilities Commission and the Regulatory Commission of Alaska. My clients are
17 primarily private water and wastewater utilities. I have testified as an expert in
18 the following subject areas: cost of capital; financing; cost of service; rate base;
19 revenue requirement; income taxes; and rate design. A copy of my regulatory
20 work experience is attached as Exhibit TJB-DT1.

21

22 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?**

23 A. Mountain Water Company (“MWC” or the “Company”).

24

25 **Q. WHAT DO YOU EXPECT TO TESTIFY ABOUT TODAY?**

26 A. I will testify on the impact on MWC’s cost of capital from Liberty Utilities Co.’s

1 (“Liberty”) acquisition of the membership units of Western Water Holdings, LLC
2 (the “Acquisition”).

3

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

5 A. To describe my analysis of the impact of the Acquisition on MWC’s capital
6 structure, and to respond to issues raised in prior testimony by Dr. John W.
7 Wilson regarding the Acquisition and MWC’s cost of capital. More specifically, I
8 will address Dr. Wilson’s assertions that there are significant cost savings due to
9 reductions in the cost of capital from the Acquisition because the funds raised to
10 acquire the membership units of Western Water Holdings by Liberty were from
11 low-cost debt.

12

13 **Q. PLEASE PROVIDE AN OVERVIEW OF YOUR TESTIMONY.**

14 A. I will explain the legal, financial and economic basis that the cost of capital is a
15 function of the investment, not the investor. The source and identity of the
16 investor is irrelevant. I will explain that the capital structure of MWC did not
17 change as a result of the Acquisition, and the nature and character of the equity
18 investment in MWC remains the same as before the Acquisition. Further, I will
19 explain that Dr. Wilson’s prior cost savings assertions rely on a double-leverage
20 argument that violates basic financial theory and relies on highly questionable
21 assumptions. I will show that there are no cost savings from a change in the cost
22 of capital using a double-leverage procedure that recognizes the impact on the
23 cost of equity and the cost of debt from increased leverage. I conclude that even
24 if there is a change to the cost of capital, and even if it indicates a reduction in the
25 cost of service, that doesn’t necessarily mean that the total cost of service is
26 lower. I find that a change in rates at this time without consideration of the

1 changes in the other cost of service constitutes single-issue ratemaking.

2

3 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

4 A. I will first provide a brief background discussion of the Acquisition including how
5 the Acquisition impacted the capital structure of MWC. Next, I will then respond
6 to the arguments made by Dr. Wilson that the Acquisition financing substantially
7 changes MWC's cost of capital, which he argues reduces the cost of service and
8 requires a change in MWC's rates. Finally, I will show that there are no cost
9 savings under a traditional double-leverage procedure modified to take into
10 account the impact on the cost of debt and equity from increased leverage.

11

12 **II. THE ACQUISITION AND THE IMPACT ON MWC'S CAPITAL**
13 **STRUCTURE AND COST OF CAPITAL.**

14

15 **Q. PLEASE DESCRIBE THE ACQUISITION OF WESTERN WATER**
16 **HOLDINGS BY LIBERTY.**

17 A. On September 19, 2014, Liberty signed a Merger Agreement and agreed to
18 purchase the membership units of Western Water Holdings, LLC ("Western
19 Water Holdings") for \$327 million. The transaction consisted of Liberty
20 assuming \$77 million of debt held by Park Water Company ("Park Water") and
21 paying \$250 million of cash. Liberty closed on that transaction on January 8,
22 2016. In other words, Liberty acquired that debt and the equity of Western Water
23 Holdings which is now a wholly owned subsidiary of Liberty.

24

25 **Q. HOW IS THE ACQUISITION RELATED TO MWC?**

26 A. Park Water is a wholly owned subsidiary of Western Water Holdings. MWC is a

1 wholly owned subsidiary of Park Water.

2

3 **Q. HOW DID LIBERTY RAISE THE CASH TO PAY FOR THE**
4 **ACQUISITION?**

5 A. At the time of Acquisition, Liberty borrowed funds totaling \$235 million and used
6 \$15 million of its own cash. I understand that, recently, Liberty paid this debt out
7 of an equity infusion from its parent.¹ Liberty paid \$250 million for the
8 membership units of Western Water Holdings and assumed outstanding debt of
9 Park Water (on a consolidated basis). The funds for the Acquisition came from a
10 short term credit facility issued on January 4, 2016 for \$235 million and cash on
11 hand at Liberty of \$15 million. That term credit facility had an expiration date of
12 July 4, 2017. Just recently, the Term Loan Agreement has been replaced with
13 equity at Liberty in accordance with its continued efforts to maintain a 55%
14 equity ratio and 45% debt ratio. On March 9, 2016, Liberty Utilities Co. retired
15 the Term Loan Agreement on its books through an infusion of equity.

16

17 **Q. DID THE TRANSACTION CHANGE THE AMOUNT OF ASSETS,**
18 **LIABILITIES, LONG-TERM DEBT OR EQUITY OF WESTERN WATER**
19 **HOLDINGS, PARK WATER, OR MWC?**

20 A. No. An investor, Liberty, purchased the membership equity of Western Water
21 Holdings from the previous investor, the Carlyle Group. No money went to
22 Western Water Holdings, Park Water or MWC. The same amount of debt that
23 existed at Western Water Holdings before the transaction existed after the
24 transaction. Further, the same amount of equity investment in Western Water

¹ See MWC's Supplemental Response to Data Request PSC-009 and Response to Data Request MCC-001.

1 Holdings before the transaction existed after the transaction. The same is true for
2 Park Water and MWC. The books, and more importantly, the capital structures
3 did not change as a result of the Acquisition.

4

5 **Q. DOES IT MATTER HOW LIBERTY FINANCED THE ACQUISITION?**

6 A. No. How Liberty financed the investment doesn't change or alter the capital
7 structure or the cost of capital of Western Water Holdings, Park Water, and/or
8 MWC. It does not matter that Liberty, or some other parent company higher up
9 the corporate structure, is the investor from a cost of capital stand point.

10

11 **Q. WHY?**

12 A. Simply stated, the cost of capital is a function of the investment, not the investor.
13 The selection of an appropriate return must be consistent with the criteria
14 established by *Hope*² and *Bluefield*³ which make it clear that the relevant
15 considerations in determining the cost of capital for a company are the
16 alternatives available to investors and the risks and returns available to those
17 alternatives. Montana has recognized and implemented these well-established
18 theories by employing a proxy group method for determining utility ROEs.

19

20 **Q. WHAT DOES FINANCIAL THEORY TELL US?**

21 A. Financial theory clearly establishes that the cost of capital is an opportunity cost
22 which depends on the use to which the capital is put, not its source.⁴ In other
23 words, the cost of capital is governed by the risk to which the capital is exposed,

² *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

³ *Bluefield Water Works and Improvement Co. v. Public Service Comm'n of W. Va.*, 262 U.S. 679, 692-93 (1923).

⁴ Morin, Roger A. *New Regulatory Finance*. Vienna Virginia, Public Utilities Reports, 2006, p.523.

1 and not by the cost of those funds or whether they were obtained from
2 bondholders or common shareholders.

3

4 **Q. DOES THE ACQUISITION OF EQUITY IN A COMPANY BY AN**
5 **INVESTOR USING BORROWED FUNDS, OR BY ANY OTHER MEANS,**
6 **CHANGE THE NATURE OF THE INVESTMENT FROM THE**
7 **INVESTOR'S PERSPECTIVE?**

8 A. No. Equity is equity regardless of its ownership or funding source. It does not
9 matter whether the investor purchased the stock, inherited the stock, or won the
10 stock in a lottery. Considering how a company's stock was acquired by an
11 investor leads to absurd results. For example, assume an investor inherited the
12 stock of utility company or received the stock as a gift. If we accept the argument
13 that how the investor acquired the stock determines the allowed rate of return, the
14 allowed return on equity would be zero since the investor got the stock for free.
15 Accepting this argument also implies that if an investor sold the company to
16 another investor with a higher cost of capital, the cost of equity in the company
17 would increase simply by a change in ownership. Further, it implies two utilities
18 that are identical in all respects but for their ownership format (a holding
19 company or independent (stand-alone) company) would have two different sets of
20 returns. This is not only inconsistent with financial and regulatory theory, but it
21 discriminates against certain forms of ownership.

22

23 **Q. HAS MWC'S COST OF CAPITAL CHANGED AS A RESULT OF THE**
24 **CHANGE IN OWNERSHIP OF WESTERN WATER HOLDINGS?**

25 A. No, MWC's capital structure, cost of debt, and equity did not change as the result
26 of the Acquisition. Further, for the reasons discussed above, I do not find there is

1 a reasonable basis to change the capital structure or the cost of debt and equity
2 used for ratemaking purposes for MWC, simply because MWC has new
3 ownership.

4
5 **III. COMMENTS ON PRIOR TESTIMONY OF DR. WILSON**

6
7 **Q. HAVE YOU REVIEWED THE TESTIMONY DR. JOHN W. WILSON**
8 **OFFERED REGARDING THE ACQUISITION IN DOCKET D2014.12.99**
9 **(THE “TRANSACTION DOCKET”).**

10 A. Yes.

11
12 **Q. WHY DID YOU REVIEW THAT TESTIMONY FOR THIS CASE?**

13 A. It is my understanding that Dr. Wilson’s testimony provided at least some of the
14 justification for the Commission’s decision to initiate this docket, and that Dr.
15 Wilson is expected to offer testimony on behalf of the Montana Consumer
16 Counsel in this matter.

17
18 **Q. PLEASE RESPOND TO DR. WILSON’S PRIOR ASSERTIONS THAT**
19 **THE COST OF CAPITAL FOR MWC IS LOWER BECAUSE**
20 **ALGONQUIN POWER AND UTILITIES CORP., THE ULTIMATE**
21 **PARENT OF LIBERTY, FINANCED THE ACQUISITION, IN PART,**
22 **USING DEBT FINANCING.⁵**

23 A. Dr. Wilson’s contention that the cost of capital for MWC is lower due to the
24 Acquisition financing is both theoretically and conceptually wrong. That said,
25 whether it is Algonquin Power and Utilities Corp. (“APUC”) or Liberty that

⁵ Found at pp. 5 and 6 of Wilson Direct Testimony, D2014.12.99.

1 provided the financing for the Acquisition, the facts are that the investor acquired
2 the equity of Western Water Holdings which had equity investments in Park
3 Water and MWC. As I stated earlier, the cost of capital is a function of the
4 investment, not the investor. MWC's cost of capital did not change as a result of
5 the Acquisition.

6 Although Dr. Wilson did not explain how MWC's cost of capital should
7 be determined, he appears to be contending that the Commission should apply
8 some version of a double-leverage argument to justify a downward adjustment to
9 MWC's cost of capital.

10
11 **Q. PLEASE EXPLAIN THE CONCEPT OF DOUBLE LEVERAGE.**

12 A. The term "double leverage" ("DL") is often used to refer to a situation where a
13 parent company uses debt, in addition to equity, to finance an investment in the
14 equity of a subsidiary. Under this concept, a double-leverage ratemaking
15 approach would compute a utility's allowed rate of return on rate base that is
16 determined by 1) calculating the average weighted cost of capital ("WACC") of
17 the parent's debt and equity and the parent's capital structure percentages, and 2)
18 calculating the utility's WACC using the parent's average weighted cost of capital
19 as the utilities cost of equity. The DL approach has largely disappeared from
20 regulatory practice.⁶ This disappearance is largely because of the serious
21 conceptual and practical problems associated with the DL concept, including the
22 highly questionable assumptions on which it rests.⁷

23 Proponents of DL argue that the true cost of capital to a utility subsidiary
24 is the weighted cost of its own debt and the weighted cost of the parent's debt and

⁶ Morin, p. 519.

⁷ *Id.* at 523-27.

1 equity funding. They argue that unless the subsidiary's equity is assigned the
2 parent's WACC, the parent shareholders will reap abnormally high returns.⁸ Or,
3 as Dr. Wilson puts it, the parent shareholders will benefit from “substantial cost
4 savings” from the financing arrangement in the Acquisition, and these savings
5 must be passed through to rate payers.⁹ While these arguments seem persuasive,
6 they conceal serious conceptual and practical problems, which I have already
7 discussed. Moreover, the validity of DL rests on highly questionable
8 assumptions.

9 To illustrate the DL procedure, consider the following example
10 computation of the WACC for a parent company and a wholly owned subsidiary
11 as shown in Table 1.¹⁰

12 **Table 1**
Subsidiary and Parent Company Cost of Capital

	<u>% Weight</u>	<u>Cost</u>	<u>Weighted Cost</u>
<u>Subsidiary</u>			
Debt	50%	6.0%	3.00%
Equity	50%	10.0%	<u>5.00%</u>
Return			8.00%
<u>Parent Company</u>			
Debt	60%	6.0%	3.60%
Equity	40%	10.0%	<u>4.00%</u>
Return			7.60%

13
14
15
16 Under the double leverage approach, the subsidiary's WACC would be computed

⁸ *Id.* at 523.

⁹ Found at p. 7 of Wilson Direct Testimony, PSC Docket No. D2014.12.99.

¹⁰ For now, we will assume that the cost of debt and the cost of equity of both the subsidiary and the parent company are the same. This assumption typically does not hold true.

1 as set forth in Table 2.

2 **Table 2**

Subsidiary Cost of Capital: Double Leverage Approach

	<u>% Weight</u>	<u>Cost</u>	<u>Weighted Cost</u>
Debt - Subsidiary	50%	6.0%	3.00%
Equity Subsidiary	50%	7.60%	<u>3.80%</u>
Return			6.80%

3 An alternative computation shown in Table 3 breaks out the imputed debt and
4 equity from the parent and results in the same 6.8 percent WACC for as shown in
5 Table 2.

6 **Table 3**

Subsidiary Cost of Capital: Double Leverage Approach

	<u>% Weight</u>	<u>Cost</u>	<u>Weighted Cost</u>
Debt - Subsidiary	50%	6.0%	3.00%
Debt (60% of parent's debt ratio)	30%	6.0%	1.80%
Equity (40% parent's equity ratio)	20%	10.0%	<u>2.00%</u>
Return			6.80%

7 Table 3 demonstrates that the double-leverage approach has the effect of
8 increasing the subsidiary's debt percent substantially. In this example, the debt
9 percentage in the capital structure has increased from 50 percent to 80 percent
10 significantly increasing risks to both debt and equity holders.

11

12 **Q. DOES THE APPROACH DR. WILSON ADVOCATED IN THE**
13 **TRANSACTION DOCKET ADHERE TO A TRADITIONAL DOUBLE**
14 **LEVERAGE APPROACH?**

15 A. No.

16

17 **Q. PLEASE EXPLAIN HOW HIS APPROACH DIFFERED FROM A**
18 **TRADITIONAL APPLICATION OF DOUBLE LEVERAGE?**

19 A. First, Dr. Wilson did not advocate for a particular cost of capital, but rather

1 indicated that very simplistic substitutions could be used to calculate a cost
2 savings resulting from the Acquisition. From a broader theoretical perspective,
3 however, Dr. Wilson has advocated that the rate from a debt issuance of Liberty's
4 ultimate parent should be substituted for his calculation of the tax adjusted equity
5 rate from MWC's prior rate case, to determine a new cost of capital for MWC.

6

7 **Q. ARE YOU AWARE OF THIS APPROACH BEING APPLIED BY ANY**
8 **COMMISSION?**

9 A. No. Dr. Wilson's approach essentially cherry picked two very different
10 components of two completely different entity capital structures and suggested
11 one could be substituted for the other. In my experience, Commission's recognize
12 the need to review costs of capital on a much more comprehensive basis.

13 **Q. DO YOU BELIEVE APPLICATION OF ANY DL APPROACH IS**
14 **APPROPRIATE FOR MWC? WHY?**

15 A. No. In addition to being out of favor with other commissions that recognize the
16 flaws, the assumptions and theories underlying the DL approach do not comport
17 with the Commission's traditional ratemaking decisions.

18

19 **Q. WHAT ARE THE ASSUMPTIONS UNDERLYING THE DL APPROACH?**

20 A. In order to justify DL adjustments to the cost of capital the following assumptions
21 are made:

- 22 • The parent's debt must be deemed to have funded the incremental investments
23 in the utility subsidiary.
- 24 • A utilities cost of debt and equity do not increase when the percentage of debt
25 in the subsidiary utility's capital structure increase substantially. In other
26 words, the resulting distortion to the subsidiary utility's financial leverage

1 does not affect the cost of capital.

- 2 • The business and financial risk profile of the parent holding company's other
3 subsidiaries are identical to the utility subsidiary's risk profile.
- 4 • A subsidiary utility's cost of equity depends not only on the utility's business
5 and financial risk, but also on the business and financial risks of the parent.
- 6 • Ratepayers always benefit when the subsidiary utility has more debt in its
7 capital structure.

8

9 **Q. LET'S START WITH THE FIRST ASSUMPTION. DOES THE**
10 **ACQUISITION OF STOCK IN A COMPANY USING DEBT AT THE**
11 **PARENT HOLDING COMPANY CHANGE THE NATURE OF THE**
12 **STOCK AS AN EQUITY INVESTMENT?**

13 A. No. As I discussed earlier on page 6, equity is equity regardless of its ownership
14 or funding source. The cost of equity is not a function of how the investment was
15 funded.

16

17 **Q. DOES THE TRANSFER OF EQUITY (E.G. STOCK) IN A COMPANY**
18 **FROM ONE INVESTOR TO ANOTHER CHANGE THE CAPITAL**
19 **STRUCTURE OF THE COMPANY?**

20 A. No. Again, as I explained earlier on page 7, the capital structure is unaffected by
21 the transfer of stock from one investor to another. The change in equity in a
22 company is only the result changes from the issuance of new equity, repurchase of
23 existing equity (e.g. treasury stock), from the net earnings of the company, and
24 distribution of earnings (e.g. dividends or distributions). The traceability of the
25 capital used to acquire a subsidiary (whether the parent holding company issues
26 bonds or new stock to acquire) is broken.

1 Another absurd result of assuming the parent has funded the investments
2 of the subsidiary is in the tracing of the subsidiary's equity capital to its parent.
3 None of the subsidiary's retained earnings can be traced to the capital raised by
4 the parent, but DL assumes otherwise. Some proponents of DL attempt to address
5 this by assigning a different equity cost rate to retained earnings. But this results
6 in two cost rates for equity which is nonsense.¹¹

7
8 **Q. IS THE RISK OF AN EQUITY INVESTMENT AFFECTED BY THE**
9 **PERCENTAGE OF DEBT IN THE UTILITY'S CAPITAL STRUCTURE?**

10 A. Yes. Generally speaking, when a firm engages in debt financing, it exposes itself
11 to greater risk. Once debt becomes significant relative to the total capital
12 structure, the risk increases in a non-linear fashion compared to the linear
13 percentage increase in the debt ratio itself. This risk is illustrated by considering
14 the effect of leverage on net earnings. For example, as leverage increases, the
15 equity ratio falls. This creates two adverse effects. First, equity earnings decline
16 rapidly and may even disappear. Second, the "earnings cushion" of equity
17 protection for debt falls.¹² A decline in the protection afforded debt holders, or the
18 possibility of a serious decline in debt protection, will act to increase the cost of
19 debt financing. As I have shown above on page 11, The DL procedure
20 substantially increases the leverage of the subsidiary which increases risk.

¹¹ Morin, pp.525-26.

¹² Remember, equity holders only have a residual claim on earnings and cash flows after debt is paid. As a company increases the relative amount of debt in the capital structure, total fixed charges increase, and the probability of failing to meet the growing fixed charges also increases. The residual earnings available to equity holders become increasing volatile and risky as the firm increases leverage. This causes equity holders to require a greater return on equity. And, as earnings decline, the cushion of earnings upon which the debt holders rely for protection from default (as measured by the debt service coverage and times interest earned) declines or may even disappear. As a result, debt becomes more risky to debt holders.

1

2 **Q. BOTH THE COST OF DEBT AND EQUITY INCREASE WITH HIGHER**
3 **LEVERAGE?**

4 A. Yes. Higher leverage increases the risk of investing in a utility's equity. As a
5 result, and because investors are risk averse, they demand a higher return on
6 equity when there is a higher percentage of debt in the capital structure. A higher
7 percentage of debt also increases the probability of financial distress. Thus, both
8 the cost of equity and the cost of debt increase significantly when the utility's
9 capital structure becomes highly leveraged.

10

11 **Q. DOES A UTILITY'S COST OF EQUITY DEPEND ON THE BUSINESS**
12 **AND FINANCIAL RISKS OF ITS PARENT?**

13 A. No. The utility's cost of debt and equity depends on the return investors expect to
14 receive on investments of comparable risk. Because the parent's business and
15 financial risks are not necessarily the same as the utility, the utility's cost of debt
16 and equity do not depend on the business and financial risks of the parent. This
17 is especially true when the utility's business is "ring fenced".¹³ It is also
18 especially true when the parent company has multiple subsidiaries of different
19 sizes and risk profiles, both regulated and unregulated. The DL argument
20 assumes the parent holding company invests its funds in each subsidiary
21 proportionately to each subsidiary's debt-equity ratio and not on the individual
22 risk profiles of each subsidiary. This assumption is not reasonable.

23 The DL procedure also incorrectly assumes that the parent's WACC,
24 which is itself a WACC of all its subsidiaries, determines the subsidiary's cost of
25 equity. But this assumption confuses the direction of cause and effect. The cost

¹³ The legal walling off of certain assets or liabilities within a corporation.

1 of equity must be found for each subsidiary on a stand-alone basis not the other
2 way around.

3

4 **Q. CAN THE WACC FOR A UTILITY ALWAYS BE REDUCED BY**
5 **INCREASING THE LEVEL OF DEBT IN THE CAPITAL STRUCTURE?**

6 A. No, not if the impacts of increasing leverage are recognized. At increasingly high
7 levels of leverage, the higher costs of debt and equity associated with higher
8 leverage no longer offset the effect of giving more weight to debt in the capital
9 structure and the WACC increases. Empirical and theoretical evidence suggests
10 the cost of capital at high levels of debt increases at a much faster rate than the
11 percentage increase in the debt ratio itself.¹⁴

12

13 **Q. DO RATEPAYERS ALWAYS BENEFIT IF THE UTILITY HAS MORE**
14 **DEBT IN ITS CAPITAL STRUCTURE?**

15 A. No. Ratepayers will not always benefit from increases in leverage because the
16 impact of a higher debt ratio is offset by the higher costs of debt and equity. In
17 other words, a higher return is necessary or the availability of capital will
18 eventually evaporate because an investor will eventually realize that it can invest
19 capital in other companies with higher returns and less risk. Ratepayers could in
20 fact be harmed if the utility is too highly leveraged because the utility may not be
21 able to raise capital to fund capital expenditures required to maintain, improve, or
22 expand customer services.

23

24 **Q. EXPLAIN WHY DOUBLE LEVERAGE IS INCONSISTENT WITH THE**
25 **COMMISSION'S APPROACH TO RATEMAKING.**

¹⁴ Morin, pp. 453-56.

1 A. The Commission does not apply the actual capital characteristics of a utility or its
2 parent, but rather relies on a careful consideration of actual capital structures and
3 returns with hypothetical capital structures and returns based on comparable
4 utilities.¹⁵ As indicated previously, in doing so, this Commission recognizes that
5 capital should be determined based on the investment rather than the investor.
6 For example, it is my understanding that for the entire life of MWC, the
7 Commission has determined its capital structure on a hypothetical basis. Under
8 this approach, since at least 1993, the Commission has used an allocated portion
9 of Park Water's debt for the debt rate, and a proxy group of companies considered
10 comparable to MWC to determine the equity rate and to determine a reasonable
11 capital structure. This approach allows the Commission to determine "reasonable"
12 rates of return, as opposed to accepting a utility's or its parent's actual returns.
13 DL reverses that situation by essentially requiring the Commission to accept a
14 parent's capital structure and capital costs, rather than determining a cost of
15 capital based on similar utilities. In more simple terms, DL requires the
16 Commission to review the investor rather than the investment.

17

18 **IV. ACQUISITION COST CAPITAL COST "SAVINGS"**

19

20 **Q. PLEASE RESPOND TO DR. WILSON'S TESTIMONY (ON PAGE 7)**
21 **THAT THE CAPITAL COST SAVINGS FROM THE ACQUISITION IS**
22 **ABOUT \$20 MILLION PER YEAR.**

23 A. Putting aside the fact that it does not matter the source of funds Liberty or APUC
24 may have used to acquire the equity of MWC and therefore there are no so called

¹⁵ Hypothetical capital structures are sometimes used by regulatory bodies if a utility is deemed to have deviated significantly from the "optimum".

1 “cost savings,” Dr. Wilson’s assumes that the \$160 million in debt issued by
2 APUC or alternatively the entire \$327 million purchase price paid by Liberty will
3 be recognized in rate base, which is not true. I would note that the \$160 million
4 Dr. Wilson refers to in his testimony was not used in the Acquisition.¹⁶ Having
5 said that, the rate bases approved in Park Water and MWC most recent rate cases
6 was about \$161 million upon which an allowed return would be determined in a
7 rate case.¹⁷ The difference between the adopted rate bases of \$161 million and
8 the \$327 million purchase price is about \$166 million. So, based on Dr. Wilson’s
9 assumption that the \$160 million of debt was used in the Acquisition, it could be
10 said the \$160 million funded the \$166 acquisition premium, and not equity, which
11 will not be recognized for an allowed return. So, ratepayers are not harmed.

12 Dr. Wilson’s computation also assumes that the embedded cost is 12
13 percent (after tax or “.16-.04”).¹⁸ But the adopted returns in the most recent rate
14 cases for Park Water and MWC are 9.07 percent¹⁹ and 9.19 percent²⁰. While I
15 have no idea where Dr. Wilson’s 12 percent (after tax) embedded cost came from,
16 the difference between the embedded cost (after tax) and the adopted returns is
17 less than 3 percent at best and not 12 percent. Further, the embedded cost Dr.
18 Wilson uses is for the Carlyle Group, not Liberty or APUC.

19
20 **Q. WHAT “COST SAVINGS” WOULD THERE BE ASSUMING A DOUBLE-**
21 **LEVERAGE PROCEDURE WERE APPLIED IN THIS CASE USING**
22 **LIBERTY AS THE PARENT HOLDING COMPANY?**

23 A. None. In fact, a DL procedure reflective of the impacts of increased leverage on

¹⁶ See MWC’s Response to Data Request PSC-009(b).

¹⁷ Note, MWC does not intend to seek to include an acquisition premium in rate base.

¹⁸ Found at p. 7, fn. 3 of Wilson Testimony, D2014.12.99.

¹⁹ California Public Utilities Comm’n Decision 16-01-009, January 14, 2016.

²⁰ Montana Public Service Comm’n Order No. 7251c, November 21, 2013.

1 the cost of debt and equity would show a “cost deficiency.” Let me explain.
2 Assuming a DL procedure is appropriate, which it is not for the reasons discussed
3 previously, and assuming Liberty is the parent holding company with a cost of
4 equity the same as MWC (9.8 percent), the most current capital structures for
5 Liberty and MWC, the current weighted cost of debt for Liberty and MWC, and
6 both the cost of equity and debt are properly adjusted for the added risks of the
7 additional leverage in the capital structure of MWC, there are no “cost savings.”

8 The computation of the WACC for a Liberty and a MWC is shown in
9 Table 4. Table 4 shows the WACC for Liberty is currently 7.41 percent and the
10 WACC for MWC is currently 7.90 percent assuming an equity return of 9.8
11 percent for both entities.

12 **Table 4**

MWC and Liberty Cost of Capital

	<u>% Weight</u>	<u>Cost</u>	<u>Weighted Cost</u>
<u>Mountain Water Company</u>			
Debt	50.36%	6.03%	3.04%
Equity	49.64%	9.80%	<u>4.86%</u>
Return			7.90%
<u>Liberty Utilities Co.</u>			
Debt	46.00%	4.61%	2.12%
Equity	54.00%	9.80%	<u>5.29%</u>
Return			7.41%

13 Following a DL procedure and recognizing the added risk of debt (1.23 percent²¹)
14 and equity (2.46 percent²²), the DL WACC is 8.28 as shown in Table 5. This is

²¹ The 1.23 percent is the current spread between the yields a Moody’s Aaa rated bond and a Moody’s Baa rated bond as reported by the Federal Reserve on March 25, 2016. I believe using the current spread is extremely conservative since we know that the cost of debt increases faster than increases in the debt ratio, not linearly, at very high levels of leverage. See Pratt, Shannon P., Grabowski, Roger J. *Cost of Capital: Applications and Examples*, Fifth Edition. Hoboken, New Jersey, John Wiley and Sons, 2014, p. 375.

²² The 2.46 percent is computed using the mid-point estimate of changes in the cost of equity for every 1 percent change in the debt leverage or 23 times 10.7. Dr. Morin

1 higher than the WACC of MWC on a stand-alone basis.

2

Table 5

Subsidiary Cost of Capital: Double Leverage Approach

	<u>% Weight</u>	<u>Cost</u>	<u>Weighted Cost</u>
Debt – Mountain Water	50.36%	6.03%	3.04%
Debt (46% of Liberty’s debt ratio)	<u>22.83%</u>	4.61%	1.05%
Total Debt – Risk Premium	73.19%	1.23%	0.90%
Equity (54% Liberty’s equity ratio)	<u>26.81%</u>	9.80%	2.63%
Total Equity – Risk Premium	26.81%	2.46%	<u>0.66%</u>
Return			8.28%

3 Note that under the DL approach, the debt ratio has increased from approximately
4 50 percent to 73 percent.

5

6 **Q. ISN’T THE WACC FOR MWC (FROM TABLE 4) OF 7.90 PERCENT**
7 **LOWER THAN THE RETURN OF 9.18 PERCENT ADOPTED IN MWC’S**
8 **LAST RATE CASE?**

9 A. Yes and this would indicate a reduction in the return component of the cost of
10 service. However, this reduction is not attributable to the Acquisition and doesn’t
11 mean that the total cost of service is necessarily lower. In the next rate case, the
12 Commission will consider changes in revenues, operating expenses, depreciation,
13 taxes, and as well as changes in the return due to changes in the cost of capital and
14 rate base.

15

16

reports that the average increase per 1 percent change in the leverage percentage is 7.6 to 13.8 basis points (mid-point of 10.7 basis points) from theoretical and empirical studies that looked at changes in the cost of debt when the debt ratio is increased from 40 percent to 50 percent. *See Morin, p. 469.* I believe using 10.7 basis points per 1 percent increase in leverage is extremely conservative since we know that the cost of equity increases faster than increases in the debt ratio, not linearly, at very high levels of leverage. *See Pratt, p. 375.*

1 **Q. ASSUMING DR. WILSON IS CORRECT AND THE COMMISSION**
2 **CONCLUDES THERE IS “COST SAVINGS” FROM CHANGES IN THE**
3 **COST OF CAPITAL ALONE, WOULD IT BE APPROPRIATE FOR THE**
4 **COMMISSION TO PASS-THROUGH THE SAVINGS OUTSIDE THE**
5 **CONTEXT OF A RATE CASE?**

6 A. No. This would constitute an extreme form of single-issue ratemaking that does
7 not take into account changes in revenues, operating expenses, depreciation,
8 taxes, and rate base. The Commission should consider changes in the total cost of
9 service and revise rates as necessary within the context of a rate case.

10

11 **Q. DO YOU BELIEVE THAT THE RATES ADOPTED BY THE**
12 **COMMISSION IN MWC’S PRIOR CASE ARE REASONABLE AT THIS**
13 **TIME?**

14 A. Yes.

15

16 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

17 A. Yes.

18

19

20

21

22

23

24

25

Exhibit TJB-DT1

**Resume of Thomas J.
Bourassa, CPA**

RESUME OF THOMAS J. BOURASSA, CPA

EDUCATIONAL BACKGROUND

B.S. Northern Arizona University Chemistry/Accounting (1980)

M.B.A. University of Phoenix with Emphasis in Finance (1991)

C.P.A. State of Arizona (1995)

Continuing Professional Education – In areas of tax, accounting, management, economics, finance, business valuation, consulting, and ethics (80 hrs every two years)

MEMBERSHIPS

Arizona Society of CPAs

Water Utilities Association of Arizona

American Water Works Association

EMPLOYMENT EXPERIENCE

- 1995 – Present CPA - Self Employed
Consultant to utilities on regulatory matters including all aspects of rate applications (rate base, income statement, cost of capital, cost of service, and rate design), rate reviews, certificates of convenience and necessity (CC&N), CC&N extensions, financing applications, accounting order applications, and off-site facilities hook-up fee applications. Provide expert testimony as required.
- Consult on various aspects of business, financial and accounting matters including best business practices, generally accepted accounting principles, generally accepted ratemaking principles, project analysis, cash flow analysis, regulatory treatment of certain expenditures and investments, business valuations, and rate reviews.
- Litigation support services.
- 1992-1995 Employed by High-Tech Institute, Phoenix, Arizona as Controller and C.F.O.
- 1989-1992 Employed by Alta Technical School, a division of University of Phoenix as Division Controller.
- 1985-1989 Employed by M.L.R. Builders, Tampa and Pensacola, Florida as Operations/Accounting Manager
- 1982-1985 Employed by and part owner in Area Sand and Clay Company, Pensacola, Florida.

1981-1982

Employed by Purdue University, West Lafayette, Indiana as
Teaching Assistant.

**SUMMARY OF REGULATORY WORK EXPERIENCE AS SELF EMPLOYED
CONSULTANT**

COMPANY/CLIENT

FUNCTION

Turner Ranches Water and Sanitation
Company

Permanent Rate Application –Water
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, and Rate Design.

ACC Docket No. W-0 1677A-97-0284

Liberty Utilities (Entrada Del Oro Sewer)
Corp.

Permanent Rate Application –Wastewater.
Prepared financing application. Prepared
schedules and testified on Rate Base,
Plant, Income Statement, Revenue
Requirement, Rate Design, and Cost of
Capital.

ACC Docket No. W-04316A-16-0078

ACC Docket No. W-04316A-16-0085

Liberty Utilities (Rio Rico Water and
Sewer) Corp.

Permanent Rate Application – Water and
Wastewater. Prepared financing
application. Prepared schedules and
testified on Rate Base, Plant, Income
Statement, Revenue Requirement, Rate
Design, and Cost of Capital.

ACC Docket No. WS-02676A-15-0368

ACC Docket No. WS-02676A-15-0371

Liberty Utilities (Bella Vista Water) Corp.

Permanent Rate Application – Water.
Prepared financing application. Prepared
schedules and testified on Rate Base,
Plant, Income Statement, Revenue
Requirement, Rate Design, and Cost of
Capital.

ACC Docket No. W-02465A-15-0367

ACC Docket No. W-02465A-15-0370

Community Water of Green Valley

Permanent Rate Application – Water.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, and Rate Design.

ACC Docket No. W-02304A-15-0263

Sahaurita Water Company

Permanent Rate Application –Water.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, Rate Design, and Cost of
Capital.

ACC Docket No. W-03718A-15-0213

Liberty Utilities (Black Mountain Sewer)
Corp.

Permanent Rate Application –Wastewater.
Prepared financing application. Prepared
schedules and testified on Rate Base,
Plant, Income Statement, Revenue

ACC Docket No. SW-0236 1A- 15-0206

ACC Docket No. SW-0236 1A- 15-0207

COMPANY/CLIENT

FUNCTION

Tierra Buena Water Company
ACC Docket No. W-02076A-15-013

Requirement, Cost of Service Study, Rate Design, and Cost of Capital.

Permanent Rate Application – Water. Assisted in preparation of short-form schedules.

Red Rock Utilities, LLC
ACC Docket No. W-04245A-14-0295

Permanent Rate Application – Water and Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Quail Creek Water Company
ACC Docket No. W-02514A-14-0370

Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Tonto Basin Water Company
ACC Docket No. W-03515A-14-0310

Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

Navajo Water
ACC Docket No. W-03511A-14-304

Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

Alaska Power Company
Regulatory Commission of Alaska
Docket No. U-14-002

Prepared schedules and testified on cost of capital.

Anchorage Municipal Light & Power
Regulatory Commission of Alaska
Docket No. U-13-184

Prepared schedules and testified on cost of capital.

Liberty Utilities (Pine Bluff) Inc.
Arkansas Public Service Commission
Docket No. 14-020-U

Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.

Abra Water Company

Permanent Rate Application – Prepared

COMPANY/CLIENT

ACC Docket No. W-01782A-14-0084

FUNCTION

schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

EPCOR Water Arizona, Inc.
ACC Docket No. W-01303A-14-0010

Permanent Rate Application – Prepared rate designs and cost of Service studies for Mohave Water District, Mohave Wastewater District, Paradise Valley Water District, Tubac Water District, and Sun City Water District.

Liberty Utilities (Midstates Natural Gas), Inc.
Missouri Public Service Commission
Case No. GR-2014-0152

Permanent Rate Application – Assist in preparing required rate application schedules for Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

Hydro Resources, LLC.
ACC Docket No. W-20770A-13-0313

Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and initial rates.

Little Park Water Company
ACC Docket No. W-02192A-13-0336

Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

Utility Source, LLC.
ACC Docket No. WS-04235A-13-0331

Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Payson Water Company
ACC Docket No. W-03514A-13-0111
ACC Docket No. W-03514A-13-0142

Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Financing Application. Prepared financial ratios and debt surcharge mechanism.

Goodman Water Company

Valuation

COMPANY/CLIENT

Verde Santa Fe Wastewater
ACC Docket No. SW-03437A-13-0292

Lago Del Oro Water Company
ACC Docket No. W-01944A-13-0215

Chaparral City Water Company
ACC Docket No. W-02113A-13-0118

Las Quintas Serenas Water Company
ACC Docket No. W-01583A-13-0117

Southwest Environmental Utilities. Inc.
ACC Docket No. WS-20878A-13-0065

Litchfield park Service Company
ACC Docket No. SW-01428A-13-0043
ACC Docket No. W-01428A-13-0042

Beaver Dam Water Company
ACC Docket No. WS-03067A-12-0232

Rio Rico Utilities
ACC Docket No. WS-02676A-12-0196

Vail Water Company
ACC Docket No. W-01651B-12-0339

FUNCTION

Permanent Rate Application – Sewer.
Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Permanent Rate Application – Water.
Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.

Permanent Rate Application – Prepared and testified on cost of service study.

Permanent Rate Application – Water.
Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Certificate of Convenience and Necessity – Water and Wastewater. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and initial rates.

Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost of Service, and Cost of Capital.

Permanent Rate Application. Prepared schedules on Plant, Income Statement, Revenue Requirement, and Rate Design.

Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue

COMPANY/CLIENT

FUNCTION

Avra Water Co-Op.
ACC Docket No. W-02126A-11-0480

Pima Utility Company
ACC Docket No. W-02199A-11-0329
ACC Docket No. SW-02199A-11-0330

Liberty Utilities (CALPECO Electric),
LLC)
Docket No. 11202020

Livco Water Company
ACC Docket No. SW-02563A-11-0213

Orange Grove Water Company
ACC Docket No. W-02237A-11-0180

Goodman Water Company
ACC Docket No. W-02500A-10-0382

Doney Park Water
ACC Docket No. W-01416A-10-0450

*Grimmelmann, et. al. v. Pulte Home
Corporation, et. al.*, case no. CV-08-1878-
PHX-FJM, the United States District Court

Requirement, Cost of Service, Rate
Design, and Cost of Capital.

Permanent Rate Application. Prepared
schedules and testified on Rate Base,
Plant, Income Statement, Revenue
Requirement, Cost of Service, Rate
Design, and Cost of Capital.

Permanent Rate Application – Water and
Sewer. Prepared schedules and testified
on Rate Base, Plant, Income Statement,
Revenue Requirement, Cost of Service,
Rate Design, and Cost of Capital.

Work on financing application.

Work on preparation of permanent rate
application. Prepared schedules on Rate
Base, Plant, Income Statement, Revenue
Requirement.

Permanent Rate Application – Water and
Sewer. Prepared short-form schedules for
Rate Base, Income Statement, Plant, Bill
Counts, and Rate Design.

Permanent Rate Application. Prepared
schedules on Plant, Income Statement,
Revenue Requirement, and Rate Design.

Permanent Rate Application – Water.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, Rate Design, and Cost of
Capital.

Permanent Rate Application – Water.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, and Rate Design.

Consultant to defendant and expert
witness for defendant on rates and
ratemaking.

COMPANY/CLIENT

for the District of Arizona.

FUNCTION

Southern Arizona Home Builders
Association

Consultant on ratemaking aspects to line
extension policies (electric).

H2O Water Company

Valuation

Tierra Linda HOA Water Company

Valuation

Las Quintas Serenas Water Company
ACC Docket No. W-01583A-09-0589

Permanent Rate Application – Water.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, Rate Design, and Cost of
Capital.

Coronado Utilities
ACC Docket No. SW-04305A-09-0291

Permanent Rate Application –
Wastewater. Prepared schedules and
testified on Rate Base, Plant, Income
Statement, Revenue Requirement, Rate
Design, and Cost of Capital.

Little Park Water Company
ACC Docket No. W-02192A-09-0531

Permanent Rate Application. Prepared
schedules on Plant, Income Statement,
Revenue Requirement, and Rate Design.

Sahuarita Water Company
ACC Docket No. W-03718A-09-0359

Permanent Rate Application – Water.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, Rate Design, Cost of
Service, and Cost of Capital.

Bella Vista Water Company
Southern Sunrise Water Company
Northern Sunrise Water Company
ACC Docket No. W-02465A-09-0414
ACC Docket No. W-02453A-09-0414
ACC Docket No. W-02454A-09-0414

Permanent Rate Application – Water.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, Rate Design, Cost of
Service, and Cost of Capital.

Rio Rico Utilities, Inc
ACC Docket No. WS-02676A-09-0257

Permanent Rate Application – Water and
Sewer. Prepared schedules and testified
on Rate Base, Plant, Income Statement,
Revenue Requirement, Rate Design, and
Cost of Capital.

COMPANY/CLIENT

FUNCTION

Litchfield park Service Company
ACC Docket No. SW-01428A-09-0103
ACC Docket No. W-01428A-09-0104

Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost of Service, and Cost of Capital.

Town of Thatcher v. City of Safford, CV 2007-240, Superior Court of Arizona

Consultant to plaintiff on ratemaking and cost of service.

Valencia Water Company
California Public Utility Commission Case No. 09-05-002

Cost of Capital

Valley Utilities
ACC Docket No. W-01412A-08-0586

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

Black Mountain Sewer Company
ACC Docket No. SW-02361A-08-0609

Permanent Rate Application – Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Far West Water and Sewer Company
ACC Docket No. WS-03478A-08-0608

Interim Rate Application (Emergency Rates)

Farmers Water Company
ACC Docket No. W-01654A-08-0502

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

Far West Water and Sewer Company
ACC Docket No. WS-03478A-08-0454

Permanent Rate Application. Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design and Cost of Capital.

Ridgeline Water Company, LLC
ACC Docket No. W-20589A-08-0173

Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rates.

COMPANY/CLIENT

Sacramento Utilities, Inc.
ACC Docket No. SW-20576A-08-0067

Johnson Utilities
ACC Docket No. WS-02987A-08-0180

Orange Grove Water Company
ACC Docket No. W-02237A-08-0455

Far West Water and Sewer Company
ACC Docket No. WS-03478A-07-0442

Oak Creek Water No.1
ACC Docket No. W-01392A-07-0679

ICR Water Users Association
Docket W-02824-07-0388

Johnson Utilities

H2O, Inc
ACC Docket No. W-02234A-07-0550

Chaparral City Water Company
ACC Docket No. W-02113A-07-0551

FUNCTION

Certificate of Convenience and Necessity – Wastewater. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and financing.

Permanent Rate Application. Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design and Cost of Capital.

Participate in 40-252 proceeding.

Permanent Rate Application. Prepared schedules on Plant, Income Statement, Revenue Requirement, and Rate Design.

Financing Application. Prepare schedules to support application.

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

Valuation consultant in the matter of the sale of Johnson Utilities assets to the Town of Florence.

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

COMPANY/CLIENT

Valley Utilities
ACC Docket No. W-01412A-07-0561

Valley Utilities
ACC Docket No. W-01412A-07-280

Valley Utilities
ACC Docket No. W-01412A-07-0278

Litchfield Park Service Company
ACC Docket No. W-01427A-06-0807

Golden Shores Water Company
ACC Docket No. W-01815A-07-0117

Diablo Village Water Company
ACC Docket No. W-02309A-07-0140

Diablo Village Water Company
ACC Docket No. W-02309A-07-0399

Sahuarita Water Company
(Rancho Sahuarita Water Co.)
ACC Docket No. W-03718A-07-0687

Utility Source, L.L.C.
ACC Docket No. WS-04235A-06-0303

FUNCTION

Financing Application. Prepare schedules to support application.

Emergency Rate Application. Prepare schedules to support application.

Accounting Order. Assist in preparing definition and scope of costs for deferral for future regulatory consideration and treatment.

Accounting Order. Assist in preparing definition and scope of costs for deferral for future regulatory consideration and treatment.

Permanent Rate Application. Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Off-site facilities hook-up fee application. Prepare schedules to support application.

Permanent Rate Application (Class C). Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Extension Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and financing.

Permanent Rate Application- Water and Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

COMPANY/CLIENT

Tierra Buena Water Company

Goodman Water Company
ACC Docket No. W-02500A-06-0281

Links at Coyote Wash Utilities
ACC Docket No. SW-04210A-06-0220

New River Utilities
ACC Docket No. W-0173A-06-0171

Johnson Utilities
ACC Docket No. WS-02987A-04-0501
Docket WS-02987A-04-0177

Bachmann Springs Utility
ACC Docket No. WS-03953A-07-0073

Avra Water Cooperative
ACC Docket No. W-02126A-06-0234

Gold Canyon Sewer Company
ACC Docket No. SW-025191A-06-0015

*State of Arizona v. Far West Water and
Sewer, No. 1 CA-CR 06-0160*

Far West Water and Sewer Company

FUNCTION

Valuation of Tierra Buena Water
Company for estate purposes.

Permanent Rate Application (Class C).
Water. Prepared schedules and testified
on Rate Base, Plant, Income Statement,
and Cost of Capital.

Certificate of Convenience and Necessity
– Sewer. Prepared pro-forma balance
sheets, income statements, plant
schedules, rate base, financing, and initial
rate design.

Extension Certificate of Convenience and
Necessity – Water. Prepared pro-forma
balance sheets, income statements, plant
schedules, rate base, and financing.

Extension of Certificate of Convenience
and Necessity – Sewer. Prepared pro-
forma balance sheets, income statements,
plant schedules, rate base, financing, and
initial rate design.

Permanent Rate Application – Water and
Sewer. Prepared short-form schedules for
Rate Base, Income Statement, Plant, Bill
Counts, and Rate Design.

Permanent Rate Application – Water.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, and Rate Design.

Permanent Rate Application – Sewer.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, Rate Design, and Cost of
Capital.

Expert witness on behalf of defendant in
penalty phase of case.

Permanent Rate Application – Sewer.

COMPANY/CLIENT

FUNCTION

ACC Docket No. WS-03478A-05-0801

Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Black Mountain Sewer Company
ACC Docket No. SW-02361A-05-0657

Permanent Rate Application – Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Balterra Sewer Company
ACC Docket No. SW-02304A-05-0586

Certificate of Convenience and Necessity – Sewer. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.

Community Water Company of Green Valley
ACC Docket No. W-02304A-05-0830

Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

McClain Water Systems
Northern Sunrise Water
Southern Sunrise Water
ACC Docket No. W-020453A-06-0251

Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.

Valley Utilities Water Company
ACC Docket No. W-01412A-04-0376

Off-site facilities hook-up fee application. Prepare schedules to support application.

Valley Utilities Water Company
ACC Docket No. W-01412A-04-0376

Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, and Revenue Requirement. Assisted in preparation of Rate Design.

Beardsley Water Company
ACC Docket No. W-02074A-04-0358

Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

Pine Water Company, Inc.
ACC Docket No. W-03512A-03-0279

Interim and Permanent Rate Application, Financing Application - Water. Prepared schedules and testified on Rate Base,

COMPANY/CLIENT

FUNCTION

Chaparral City Water Company
ACC Docket No. W-02113A-04-0616

Plant, Income Statement, Cost of Capital,
and Rate Design.

Permanent Rate Application. Prepared
schedules and testified on Rate Base,
Plant, and Income Statement. Assisted in
preparation Rate Design.

Tierra Linda Home Owners Association
ACC Docket No. W-0423A-04-0075

Certificate of Convenience and Necessity
– Water. Prepared pro-forma balance
sheets, income statements, plant
schedules, rate base, financing, and initial
rate design.

Diamond Ventures - Red Rock Utilities
ACC Docket No. WS-04245A-04-0184

Certificate of Convenience and Necessity
– Water and Sewer. Prepared pro-forma
balance sheets, income statements, plant
schedules, rate base, financing, and initial
rate design.

Arizona-American Water Company, Inc.
ACC Docket No. WS-01303A-02-0867
ACC Docket No. WS-01303A-02-0868
ACC Docket No. WS-01303A-02-0869
ACC Docket No. WS-01303A-02-0870
ACC Docket No. WS-01303A-02-0908

Permanent Rate Application Water and
Sewer (10 divisions). Prepared schedules
and testimony on Rate Base, Plant,
Income Statement, and Revenue
Requirement. Assisted in preparation of
Rate Design.

Bella Vista Water Company, Inc.
ACC Docket No. W-02465A-01-0776

Permanent Rate Application - Water.
Prepared schedules and testimony on Rate
Base, Plant, Income Statement, and
Revenue Requirement. Assisted in
preparation of Cost of Capital and Rate
Design.

Green Valley Water Company
Docket (2000 Not Filed)

Permanent Rate Application. Prepared
schedules and testimony on Rate Base,
Plant, Income Statement, and Revenue
Requirement. Assisted in preparation of
Cost of Capital and Rate Design.

Gold Canyon Sewer Company
ACC Docket No. SW-02519A-00-0638

Permanent Rate Application - Sewer.
Prepared schedules and testimony on Rate

COMPANY/CLIENT

FUNCTION

Rio Verde Utilities, Inc.
ACC Docket No. WS-02156A-00-0321

Base, Plant, Revenue Requirement, and Income Statement. Assisted in preparation of Cost of Capital and Rate Design.

Permanent Rate Application – Water and Sewer. Prepared schedules and testimony on Rate Base, Plant, Revenue Requirement, and Income Statement. Assisted in preparation of Cost of Capital and Rate Design.

Livco Water Company
Livco Sewer Company
ACC Docket No. SW-02563A-05-0820

Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

Livco Water Company
ACC Docket No. SW-02563A-07-0506

Permanent Rate Application – Water and Sewer. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

Cave Creek Sewer Company

Revenue Requirement, Rate Adjustment and Rate Design - Sewer.

Avra Water Cooperative
ACC Docket No. W-02126A-00-0269

Permanent Rate Application – Water. Assisted in preparation of Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

Town of Oro Valley

Revenue Requirements, Water Rate Adjustments and Rate Design.

Far West Water Company
ACC Docket No. WS-03478A-99-0144

Permanent Rate Application – Water. Assisted in preparation of schedules for Rate Base, Income Statement, Revenue Requirement, Lead-Lag Study, Cost of Capital, and Rate Design.

MHC Operating Limited Partnership
Sedona Venture Wastewater
ACC Docket No. W-

Permanent Rate Application – Sewer. Assisted in preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.

Vail Water Company

Permanent Rate Application. Assisted in

COMPANY/CLIENT

ACC Docket No. W-01651B-99-0406

E&T Water Company

ACC Docket No. W-01409A-95-0440

New River Utility

ACC Docket No. W-01737A-99-0633

Golden Shores Water

ACC Docket No. W-01815A-98-0645

Ponderosa Utility Company

ACC Docket No. W-01717A-99-0572

FUNCTION

preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.

Permanent Rate Application - Water.
Assisted in preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.

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